

BADGER STATE

Smoke Signals

For Radio Amateurs • By Radio Amateurs

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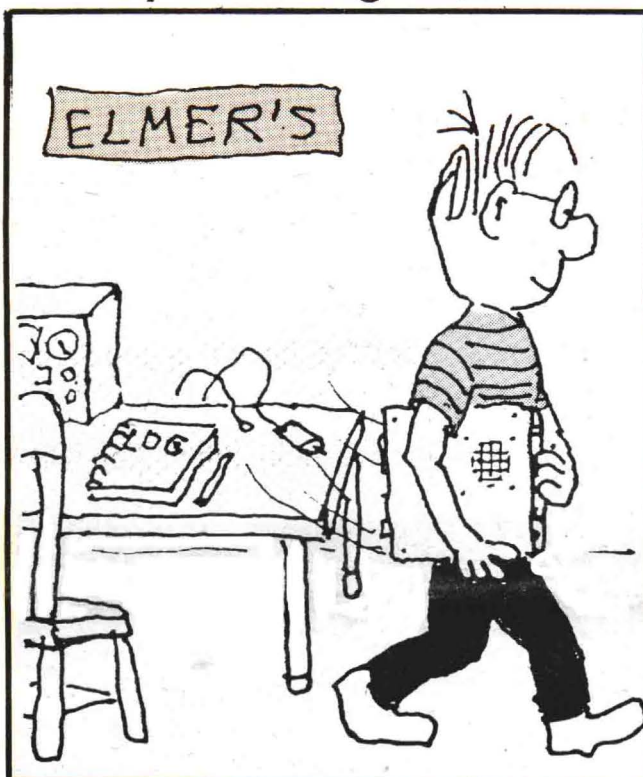
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ELMER

By Rich Regent, K9GDF



Incumbent Wins Again in ARRL Central Division Balloting

American Radio Relay League incumbent Vice-Director Howard Huntington, K9KM, was elected to another two-year term in the election just concluded, handily beating two challengers for the office. The tallies for the candidates were:

Howard Huntington, K9KM, 2231;
Michael Hoshiko, W9CJW, 1065; and
Kenneth A. Ebnetter, K9EN, 928.

Huntington and the incumbent director, Ed Metzger, W9PRN, will serve for the 1991-1992 term of office. Metzger was unopposed for reelection.

- Thanks Perry Williams, WIUED,
ARRL Headquarters

Hanukkah Greetings

ON THE INSIDE

Swapfests and Other Social Events	2
Club Meetings	3
The Test Point	3
Wisconsin Nets Association	4
Here and There	5
Pohnpei - Land of Parrots and Precipitation	6
The Importance of Radials	7
New Products	9
Riverland Amateur Radio Club	12
Eau Claire Amateur Radio Club	12
Northern Wisconsin Radio Club	13
Racine Megacycle Club	15
Taylor County Area Amateur Radio Club	16
The Wisconsin Packeteer	17
Yellow Thunder Amateur Radio Club	19

Ken Ebnetter, K9EN
Chairman/Circulation
Don Evenson, K9JYX
Production Assistant

*Season's Greetings from
the Badger State Smoke
Signals Staff!*

Jim Decker, WB9UQT
Treasurer
Jim Romelfanger, K9ZZ
Editor

Swapfests and Other Social Events

SUNDAY, DECEMBER 9, 1990. Winter Fest '90. Orland Park Civic Center, Orland Park, IL. Contact: GMRS of Illinois, Inc., 2077 Roosevelt Road, Wheaton, IL 60187. (708) 690-1492

SATURDAY, JANUARY 12, 1991. WARAC Midwinter Swapfest, Waukesha County Expo Center Forum, Highways J & FT, Waukesha, WI. Contact: WARAC Swapfest, P.O. Box 1072, Milwaukee, WI 53201. (See flyer ad with full details elsewhere in this issue of BSSS)

SUNDAY, JANUARY 27, 1991. Wheaton Community Radio Amateurs Hamfest-91. Held at the Odeum Exposition Center, Villa Park, Illinois. Contact: WCRA, PO Box QSL, Wheaton, IL 60189.

SUNDAY, MARCH 24, 1991. Lamarsfest, Lake County Fairgrounds, Grayslake, IL. Contact: LAMARS, Box 751, Libertyville, IL 60048. Commercial exhibitors call Frank Avellone, W9GLO, (708) 295-6300.

SUNDAY, APRIL 7, 1991. MARA Swapfest, Madison WI. (See ad on last page this issue.)

SATURDAY, MAY 4, 1991. 13th annual Cedarburg Swapfest at the Circle-B Recreation center, Highway 60 and County I. Contact: ORC Swapfest, 11448 Laguna Drive, Mequon, WI 53091. (414) 242-4995.

SATURDAY, MAY, 11, 1991. Lakeshore Swapfest, Manitowoc, WI.

SATURDAY, JULY 6, 1991. South Milwaukee Swapfest. (See ad on last page this issue.)

AUGUST 23-25, 1991. 1991 ARRL NATIONAL CONVENTION AND HAMFEST. Saginaw, Michigan. Contact: 1991 National ARRL Convention, P.O. Bx 1783, Saginaw, Michigan.

SUNDAY, OCTOBER 13, 1991. KMRA Swapfest, Waukesha, WI.

As a service to our readers, this section of Badger State Smoke Signals is available without charge to list your upcoming Swapfest, Hamfest, dinner, picnic, party or other event of interest to Radio Amateurs in Wisconsin and nearby areas.

Send information on your event to Kenneth A. Ebnetter, K9EN, 822 Wauona Trail, Portage, WI 53901. In addition, space is available at attractive rates on our advertising pages. For information on rates and requirements for our advertising pages, please contact K9ZZ or K9EN.

Club Meetings

BADGER AMATEUR RADIO SOCIETY

(W9YT - UNIVERSITY OF WISCONSIN - MADISON)
Monthly while school in session - 2nd Wednesday - 7:30 p.m. - B-314, Electrical Engineering Building.

CENTRAL WISCONSIN RADIO AMATEURS, LTD. (STEVENS POINT)

Second Wednesday.

EAU CLAIRE AMATEUR RADIO CLUB

2nd Tuesday - 7:30 p.m. - Parks and Recreation Bldg., Oxford and 1st Streets, Eau Claire. Hams, guests welcome. Travelers welcome on wide area club repeater K9UXP, 146.31/91.

FOUR LAKES AMATEUR RADIO CLUB (MADISON WI)

First and third Tuesdays - 7:30 p.m. - Red Cross Bldg., 4860 Sheboygan Ave.

FOX CITIES AMATEUR RADIO CLUB

Third Monday - 7:00 p.m. - Roosevelt Jr. High School, 318 E. Brewster St., Appleton. Info: (414) 766-3886.

GREATER MILWAUKEE DX ASSOCIATION

Fourth Monday of the month at 7:30 p.m. Contact Jerry Scherkenbach, N9AW, at (414) 481-8831 for meeting location.

GREEN BAY MIKE AND KEY CLUB

Second Thursday - Red Cross Bldg., corner Danz and Deckner, Green Bay.

GREEN FOX AMATEUR RADIO CLUB

Third Monday - 7:30 p.m. - Green Lake Town Hall, int. of county hwy. K and N.

KETTLE MORAINES RADIO AMATEURS

Second Friday, 7:30 p.m. at the Waukesha County Technical College, Campus Science Building, Room 102. Talk-in on the N9KS 147.39 repeater.

LAKESHORE RPTR. ASSN.

Last Tuesday, Jan., Apr., Jul., & Oct., 7:30 p.m. Red Cross Bldg., 4521 Taylor Ave., Racine, WI.

MADISON AREA REPEATER ASSOCIATION

1990 meeting dates: Annual Christmas Party on December 10, at the Heirtage House Smorgasbord restaurant, on Lien Road, off of East Washington Ave.

MANITOWOC COUNTY RADIO AMATEURS

Directors Meeting: First Wednesday.
General meeting: Second Wednesday.
Both meetings held at 7:30 p.m. in the basement, Manitowoc City Hall, 817 Franklin St., Manitowoc.

MENOMONEE FALLS AMATEUR RADIO CLUB

Last Tuesday - Doors open 7:30 p.m., meeting begins 8:00 p.m. - Security Savings and Loan, Menomonee Falls. Amateurs and guests welcome.

MILWAUKEE RADIO AMATEURS CLUB

Fourth Thursday - Wauwatosa Savings and Loan, 7500 W. State St. No meetings in July, August and December. Meetings begin at 7:00 pm.

NORTHERN WISCONSIN RADIO CLUB

4th Tuesday - 7:30 p.m., Sept. through April. Peppermill Restaurant, Thunderbird Mall North, Menomonie, WI. Guests welcome.

NORTHWOODS ARC (RHINELANDER WI)

Third Tuesday. Doors open at 7:00 p.m. Meeting at 7:30 p.m. South Park School, Rhineland, WI. Talk-in on 146.93/.34. All interested visitors to the Northwoods are welcomed.

OZAUKEE RADIO CLUB

Second Wednesday - 7:30 p.m. - Saukville Community Center.

QCWA - WISCONSIN CHAPTER #55

Contact Robert Halbman, AJ9P, Treasurer, For information about meeting dates or joining QCWA Chapter #55. The Wisconsin Chapter holds Spring and Fall dinner meetings.

QCWA - SOUTHEAST WISCONSIN CHAPTER #162

Meets third Monday monthly, 7:30 p.m., Around the Clock Restaurant, 3012 Rapids Drive, Racine.

RACINE MEGACYCLE CLUB

Second Monday, 7:30 p.m., Red Cross Bldg., 4521 Taylor Ave., Racine, WI

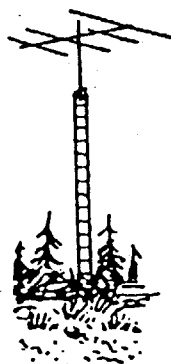
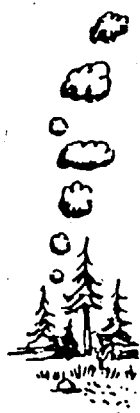
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ADDRESS CHANGES AND CORRECTIONS should be sent to Kenneth A. Ebnetter, address above.

EDITORIAL MATERIAL, PHOTOGRAPHS, FEATURE ARTICLES, AND EXCHANGE PAPERS should be sent to Jim Ronelfanger, address above.

DISPLAY ADS or INQUIRIES REGARDING DISPLAY ADS may be directed to Larry Westlund or Kenneth Ebnetter, addresses above.

SUBSCRIPTIONS should be sent, with check or money order (do not send cash), to Jim Decker, address above.

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SUBSCRIPTIONS

1 year	(12 issues)	\$8.50
2 years	(24 issues)	\$16.00
3 years	(36 issues)	\$23.00

RIVERLAND AMATEUR RADIO CLUB

First Tuesday - 7:30 p.m. - Onalaska Community Center, Onalaska WI.

ROCK RIVER RADIO CLUB

Monthly - first Tuesday - 7:00 p.m. at Dodge County Sheriff's Department, 141 N. Main, Juneau, WI.

ARES Net: 146.04/146.64 Mondays at 7:30 p.m. Saturdays on 7277 KHz at 10:30 a.m.

SHEBOYGAN COUNTY AMATEUR RADIO CLUB

Second Tuesday - 7:00 p.m. - Sheboygan Red Cross/Boy Scout Bldg., 2032 Erie Ave.

SOUTH MILWAUKEE AMATEUR RADIO CLUB

First Wednesday - Legion Post 434, Shepard Ave., Oak Creek WI. Auctions in March and October.

TAYLOR COUNTY AREA AMATEUR RADIO CLUB (TCAARC)

MEDFORD

Usually the 2nd Thursday of the month at 7:00 PM sharp. Usual location: emergency government meeting room, basement of Sheriff's Annex to Taylor County Courthouse, 2nd and Ogden Sts., Medford, WI. Talk-in on 147.75/15 or 145.27(-600) repeaters. Amateurs & guests are welcome. ARS Net, Wednesday nights at 8:30 PM on 147.75/15. For info contact: Rolland Walty, W9LEE, W4117 Hwy. 102, Westboro, WI 54490. (715) 427-3492

TRI-COUNTY AMATEUR RADIO CLUB

Second Sunday of each month. Meetings are held at 7:00 p.m., at the Trinity Lutheran Church, 314 Barrie, Fort Atkinson, WI.

WASHINGTON COUNTY AMATEUR RADIO CLUB

Tuesday: ARES/RACES - 7:30 p.m., club meeting - 8:00 p.m., Town of Polk Town Hall, Hwy. 60 and Scenic Dr. Net on 146.13/73 every Monday 7:30 p.m.

WATERTOWN AMATEUR RADIO CLUB

First Thursday of the month at 7:00 p.m., The Watertown Public Library, 100 S. Water St., Watertown, WI

WAUPACA AMATEUR RADIO CLUB

First Saturday in March, June, September and December, at 9:30 a.m. at the Waupaca Fire Station in downtown Waupaca.

"CQ First Tuesday" - A social gathering and dutch treat luncheon at the King's Table in King, WI, on Highway QQ just south of highways 10 and 54 on the west side of Waupaca.

WEST ALLIS RADIO AMATEUR CLUB

Second Tuesday - 8:00 p.m. - St. Francis Savings, 9330 W. Greenfield Ave.

WISCONSIN ASSOCIATION OF REPEATERS

Meetings are held Quarterly, with time and location to be announced. Repeater licensees, trustees, and sponsors are urged to attend W.A.R. meetings. All interested parties are welcome, as well.

WISCONSIN VALLEY RADIO ASSOCIATION (WAUSAU)

First Tuesday - 7:30 p.m. - Location varies; info on 146.04/64, Wausau.

YELLOW THUNDER AMATEUR RADIO CLUB (BARABOO)

Days rotate: Scheduled meeting dates:

December 13 (Thursday) Room 14

January 15 (Tuesday) Room --

February 13 (Wednesday) Room --

All meeting at the Baraboo Civic Center, Baraboo, WI. Meetings start 7:30 p.m.

Let Badger State Smoke Signals know your club's meeting dates, and we will let our readers know of your meetings and activities. There may be Amateurs in your area interested in joining your club, or members of other clubs interested in making an interclub visit.

Due to space limitations, we cannot always carry the full listing of Wisconsin and area club meetings. Please save this section for future reference. Will publish any changes we receive, and try to have a complete listing several times a year.

The Test Point

Amateur Radio examinations
scheduled in and around Wisconsin

The following are known locations where Amateur Radio license examinations are scheduled in the Badger State area. (Underlined are added or changed since last months BSSS.)

December 1, 1990	Stevens Point, WI
December 5, 1990	Milwaukee, WI (MRAC)
December 8, 1990	Dubuque, IA
December 13, 1990	Marshfield, WI
December 15, 1990	Marshfield, WI
December 15, 1990	Milwaukee, WI (BE)
January 21, 1991	Waukesha, WI (MRAC)
Monthly, First Sat.	Racine, WI
(except January, July & August)	
Monthly, Last Sat.	Tomahawk, WI
(January thru October only)	
Monthly, Third Sat.	Loves Park, IL
Minnesota tests listed at end of column	

GENERAL RULES FOR MOST EXAMINATIONS:

Be sure to check with sponsors in the event there are changes and/or errors in the dates or information given.

Most examinations require filing an FCC Form 610 and advance registration at least 30 days before the exam date. (Some VECs permit walkins. Check with sponsor.)

To register, you must first secure a copy of the current FCC Form 610 and fill it out completely (AND CORRECTLY). Get your form from an FCC Field Office, the ARRL or Badger State Smoke Signals. Send a 25¢ SASE if you request one from the ARRL or BSSS. In most cases, forms can also be obtained from the sponsoring group.

ARRL/VEC examinations require a check for \$4.95 payable to "ARRL/VEC".

The FCC now requires applicants to show their original Amateur license to the VEC. A copy of your license must be attached to your FCC form 610. You will also be required to have a photo ID, or other acceptable identification.

Technician class licensees must show proof of testing before March 21, 1987, in order to upgrade to General with a code test only.

Additional information is given below.

MILWAUKEE RADIO AMATEURS' CLUB - MRAC/VEC

1990 examination dates: Dec. 5.

1991 examination dates: Jan. 21. WARAC Midwinter Swapfest, Waukesha, WI. (Exams at Red Carpet Lanes across street from Expo Center.)

Tests (except Jan. 21) are Wednesday evenings at 7:00 p.m. at Wauwatosa East High School, North 74th and Milwaukee Avenue. Enter through the southmost entrance on 74th Street. Go to room 256 on the 2nd floor. Please arrive promptly, so testing can be completed before 10:00 p.m. Bring along your original license and two (2) good quality photocopies, plus two forms of identification, such a driver's license, etc. Also required are a pen and \$4.75 for the exam fee. WALKINS are welcome. To register in advance, use a 15 cent U.S. post card: print the grade of license you are applying for, and your name, address, and telephone number. Send the card to MRAC/VEC, c/o Jack Krause, W9JK, 1737 North 116th Street, Wauwatosa, WI 53226, or to Ed Sergua, KE9JJ, 3840 South 43rd Street #21, Milwaukee, WI 53220. Telephones: (414) 774-6999 or (414) 545-6299.

BADGER EXAMINERS (BE) - MILWAUKEE

Dec. 15.

Unless otherwise noted, examinations are administered beginning at 1:00 p.m. to 3:30 p.m. at St. Nicholas Church basement, 5345 N. Green Bay Ave. (2 1/2 blocks south of Silver Spring), Milwaukee. Walkins are welcome. To register in advance, send a post card with your name, test or tests you wish to take, date you wish to take., your call sign, address and telephone number to Badger Examiners, Gary J. Sharbuno, WI9M, 5119 W. Willow Rd., Brown Deer, WI 53223. Telephone (414) 355-0237.

STEVENS POINT, WISCONSIN

December 1, 1990

Blue Top Supper Club at south edge of the city on Business 51. Contact: Joe Larson, N9JW, 644 Portage St., Stevens Point, WI 54481. (715) 344-1182.

MARSHFIELD, WISCONSIN

Dec. 13, 7:00 p.m. - Dec. 15, 9:00 a.m.

Exams are given by the Marshfield Area Amateur Radio Society, at St. Joseph Hospital, St. Joseph Ave., Marshfield, WI. Contact Bob Mc Daniels, WA9K, 904 W. Blodgett St., Marshfield, WI 54449 (715) 389-2256

RACINE, WISCONSIN - ARRL/VEC

Monthly - first Saturday, except January, July, and August.

Exams are given at 9:00 a.m. at the Red Cross Building, 4521 Taylor Avenue, Racine. Walkins are permitted. Inquiries and registrations should be directed to William Firchow, Jr., NW9P, 1912 27th Street, Kenosha, WI 53140, telephone (414) 658-8390.

(continued on page 19)

Wisconsin Nets Association Ltd.

Wisconsin Nets

Net	WNA	Freq.	UTC	CST	Mgr.
BWN	Yes	3984	1200	0600	W9AYK
BEN	Yes	3985	1800	1200	N9IAI
WSBN	Yes	3985	2330	1730	K9UTQ
WNN	Yes	3723	2400	1800	KA9FVX
WSSN	Yes	3645	0030	1830	N9BDL
WIN/E	Yes	3662	0100	1900	WB9ICH
WIN/L	Yes	3662	0400	2200	W9NGP
NWTN	Yes	34/94	0030	1830	NS9Q
(Rhinelander area)					
6:30 Net	No	01/61	0030	1830	KA9OMC
Gr. Bay	No	72/12	0245	2045	WB9NRK
(Green Bay area)					
ARES	No	4.65/5.25	0200	2000	
(South East/South Central Wisconsin)					
RACES	No	3993.5	1815	1215	WC9AAG
(USB Tuesday and Thursday)					
RACES	No	3993.5	1400	0800	WA9OAY
(LSB Sunday)					

Section Manager's Notes



Richard R. Regent, K9GDF
5003 South 26th Street
Milwaukee, WI 53221

Welcome to new Section Emergency Coordinator WB9SMM. Sincere thanks to W9ZAG for his industrious efforts during the past four years as our SEC.

Sorry to report that Richard O. Hugi, KC9CJ, our hard working Section Traffic Manager and Badger Weather Net Manager, became a Silent Key. We will miss Dick.

Other Silent Keys N9CNO, W9MUI, W9VCL, and K9YZI.

Welcome to new STM Don, K9KSA, and to new BWN NM Jim, W9AYK.

N9EAX encourages everyone to ask Amateur Radio related questions on the Help Net, Tuesdays at 9 p.m., on 145.13 in Milwaukee.

Madison ARA, with 180 members, has plans to put 146.76 repeater antenna up on U.W. Hospital roof; they have net on 147.15 Wednesdays at 9 p.m.

Fox Cities ARC Annual Dinner January 12th around 7 p.m. at Columbus Club in Appleton; also acquired a Ford van for emergency communications.

January 12th, West Allis RAC Midwinter Swapfest in Waukesha.

Exams in Tomahawk, January 26th, WA9W for info.

Wishing you the best for the New Year 1991.

Richard O. Hugi, KC9CJ, We Miss You

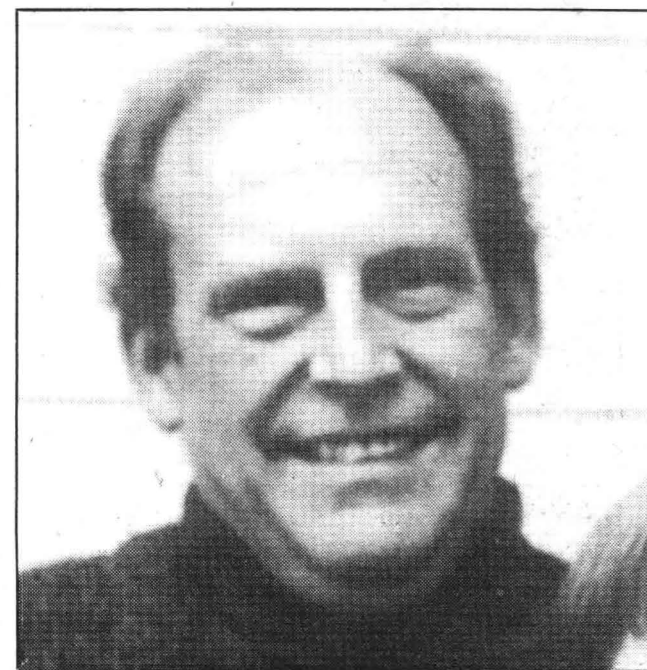
By Richard R. Regent, K9GDF
5003 South 26th Street
Milwaukee, WI 53221

Richard "Dick" O. Hugi, KC9CJ, born July 26, 1942, died October 24, 1990, at the age of 48. Dick was most active in promoting and handling traffic. Even several years before being appointed as ARRL Section Traffic Manager for Wisconsin on May 19, 1989, Dick gave thorough traffic programs at clubs, was a regular on CW and phone nets, had consistent high traffic counts, earned BPL awards, and was a leader on the Public Service Honor Roll. KC9CJ was Net Manager for WIN/L for a while, and recently for the Badger Weather Net.

Dick loved to help everyone he met to learn about Amateur Radio. As a Volunteer Examiner for the MRAC VEC, he gave tests to newcomers. He was found at most swapfests helping occasionally at the League booth and attending club meetings like the Ozaukee RC, W/K RC, and other clubs. KC9CJ was always helpful, friendly, and had a positive attitude about Amateur Radio.

With some difficulty, I began writing a list of the many credits we can give Dick for his volunteer work in Amateur Radio. I thought, "If I could get some help in remembering all the activities." On October 26th, as I was groping for the right words, the mail came. An envelope postmarked "Wausau 24 October 1990" (the day Dick passed away), had a return address R. O. Hugi, 330 7th St., Pt Edwards, WI 54469. The Hugs had moved there on October 1st. I knew, while I carefully opened the envelope, that it would be the last message from my friend. May I share some of Dick's words with you here, as he has found the words for which I have been searching.

"Port Edwards is a small community just outside of Wisconsin Rapids. Our family had been looking for a chance to make a move for some time and the opportunity arose a few months ago. We have finally achieved some semblance of order after the move, and are now almost settled in and



Richard O. Hugi, KC9CJ

unpacked. Needless to say, my lifestyle has changed considerably, and it has been a change for the better. I have been able to relax much more than in the past and enjoy my family life, ham radio, and other pastimes."

Dick's letter continues: "I hope to be able to talk to more club groups up in this area about traffic handling and the ARRL...." "....the nets are in fine shape and doing quite well. Traffic remains about the same. More at the end of the month. I hope to hear from you. I will be on packet fairly soon. That should make it fairly easy to reach me. 73, Dick."

Dick apparently had a heart problem, yet always gave his best efforts to help others in Amateur Radio. His funeral was held at Taylor Funeral Home, Wisconsin Rapids. He leaves his wife Kathy and three children - a girl and two boys. When his brother passed away a few years ago, the Hugs adopted the brother's two boys.

We miss you, Dick.

New ARES Net to Serve S.E./S.C. Wisconsin

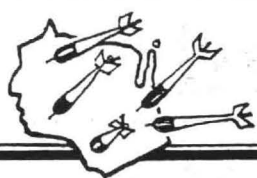
A new Amateur Radio Emergency Service (ARES) net has begun operating on the 145.25 MHz repeater, which is located in southern Washington County. The net is intended to encourage ARES activity through checkins, and to provide a means of interaction among Emergency Coordinators (ECs) and Assistant ECs throughout southeastern and south-central Wisconsin. All stations are encouraged to check in. The net, called The Southeast Area

ARES Net, meets at 8:00 p.m. local time on Mondays.

The net will act as a clearinghouse for information and questions related to County and area ARES activities, provide support for County and local operations, handle any traffic offered, encourage use of the 145.25 ARES repeater for traffic and severe weather information, and encourage participation by County EC-appointed relay stations during severe weather (the Amateur Radio station at the new National Weather Service Office at Sullivan operates on this repeater).

- John Leekley, WB9SMM
Milwaukee County EC/Wisconsin SEC

More WNA and ARES news is on page 8.



HERE and THERE



DX VISITOR: Among the guests at the November 6 meeting of the Four Lakes Amateur Radio Club in Madison was the gentleman pictured above - Dhiya Al-Shurougi, A92DQ, from Bahrain.

THE QUEEN MARY IS BACK ON THE AIR.

After a year of inactivity, the ship's Amateur Radio station - W6RO, the club call sign of the Associated Radio Amateurs of Long Beach - once again provides a look at the hobby to visitors (as well as an opportunity to operate for visiting hams). Nate Brightman, K6OSC, is radio room manager.

- The ARRL Letter, 11/2/90

A SPECIAL EFFORT TO REDUCE A SIZEABLE BACKLOG IN DXCC SUBMISSIONS has begun at ARRL HQ. Coordinated by Business Manager Barry Shelley, staff throughout the building are helping with routine processing of applications.

Ganging up to produce the backlog were the addition of several new DXCC countries, the peak of the solar cycle, and new band endorsements for Amateur Radio's most popular award.

- The ARRL Letter, 11/2/90



Badger State Smoke Signals

BUT MOM, FREDDIE AND I HAD TO LOOK ALL OVER TOWN FOR THESE EMPTY CANS --- WE'RE GOING INTO THE TELECOMMUNICATIONS BUSINESS!

AMATEUR RANKS CONTINUE GROWTH:

Both new Amateur Radio licenses and license upgrades showed a healthy increase in the past year. FCC statistics for the fiscal year ended Oct. 1 have been released (statistics actually were compiled through Sept. 25) and are shown below, along with the five-year trend.

Year	New	Upgrades
1990	26,134	29,699
1989	23,065	26,789
1988	21,080	26,342
1987	24,338	23,814
1986	20,979	22,228
1985	17,373	16,184

The total number of amateur operator licenses grew 6.1 percent, from 464,800 to 493,292. Here is the breakdown by license class:

Extra	52,847
Advanced	104,365
General	119,158
Technician	125,217
Novice	91,705
Total	493,292

- The ARRL Letter, 11/2/90

STOCKING STUFFER: A book written by Ken Lange, Naturalist for Devils Lake State Park, has absolutely nothing to do with Amateur Radio - but that doesn't mean it isn't interesting reading, or that it wouldn't make a great holiday gift (or a nice present for yourself!). The book, *Ancient Rocks and Vanished Glaciers*, is filled with information about the park and its history and geology. Lange has written several other books about the park, as well. *Ancient Rocks and Vanished Glaciers* is hardbound, and is well illustrated. It is priced at \$12.00 postpaid. Checks should be payable to Devils Lake Concession Corporation, and may be ordered from them at Devils Lake State Park, S5975 Park Road, Baraboo, WI 53913.

AT THE FRONT: The New Bern (NC) Amateur Radio Club will sponsor a Novice licensing class using ARRL materials. Not news? The news is the class will be conducted in Saudi Arabia, under the direction of U.S. Marine Mark Bitterlich, WA3JPY.

Bitterlich, 37, has asked the club to send the study materials "to relieve the boredom and inactivity of those serving in 'the sand pile.'" The club's next step is to get accreditation for a volunteer examination team.

- The ARRL Letter, 11/2/90

THE 1991 ARRL HANDBOOK is off the press. Weighing in at 1,232 pages, it costs \$25 (hardcover only) at radio stores (see the last page of this issue of *BSSS*). For direct shipment from ARRL, add \$3.50 for mail or \$4.50 for UPS shipping. (ARRL, 225 Main St., Newington, CT 06111.)

- The ARRL Letter, 11/2/90

"The Long Walk Home" is a movie that marks a significant change in the career of Dave Bell, W6AQ. This is the first full-length theatrical release motion picture from the man who brought the Amateur Radio community its first exposure on the screen in films that included *The Ham's Wide World*, *Moving up to Amateur Radio*, and *The World of Amateur Radio*.

According to the *Hollywood Reporter* trade newspaper, *The Long Walk Home* is being heralded as "a triumphant human drama about the relationship between a proper Southern housewife and her dedicated black maid, set against the backdrop of growing racial tensions circa 1955." The 97-minute film stars Sissy Spacek as the Montgomery, Alabama housewife, and Whoopi Goldberg as the housekeeper.

Bell co-produced *The Long Walk Home* with Howard Koch, Jr. It was directed by Richard Pearce, whose credits include the motion pictures *Heartland*, *Country*, and *Threshold*. W6AQ told *Westlink* that *The Long Walk Home* will premiere Christmas week in New York and Los Angeles, with general release nationwide slated for January.

- Westlink Report, 11/9/90

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Pohnpei - Precipitation, Parrots, and Propagation

By Nancy Vander Velde, AA6EA
P.O. Box 1603, Majuro, MH 96960

It rains on Pohnpei. In fact, it rains a LOT on Pohnpei, with over 400 inches of rain falling every year on its 2,000-foot mountainous regions, making it the rainiest area in all of Micronesia.

But all of this precipitation naturally does not just sit on the tops of the high hills - it runs down toward the sea. And enroute, it creates small streams and larger rivers, some with classically beautiful cascading waterfalls. Thus, many homes scattered about the more urban regions of the 324 square mile island have their own private stream rushing by, shared only by freshwater shrimp and eels.

The people living in the capital of Kolonia also benefit from the river-fed torrents. Recently, a hydroelectric operation was put into effect, although it still needs to be supplemented by more standard diesel generators.

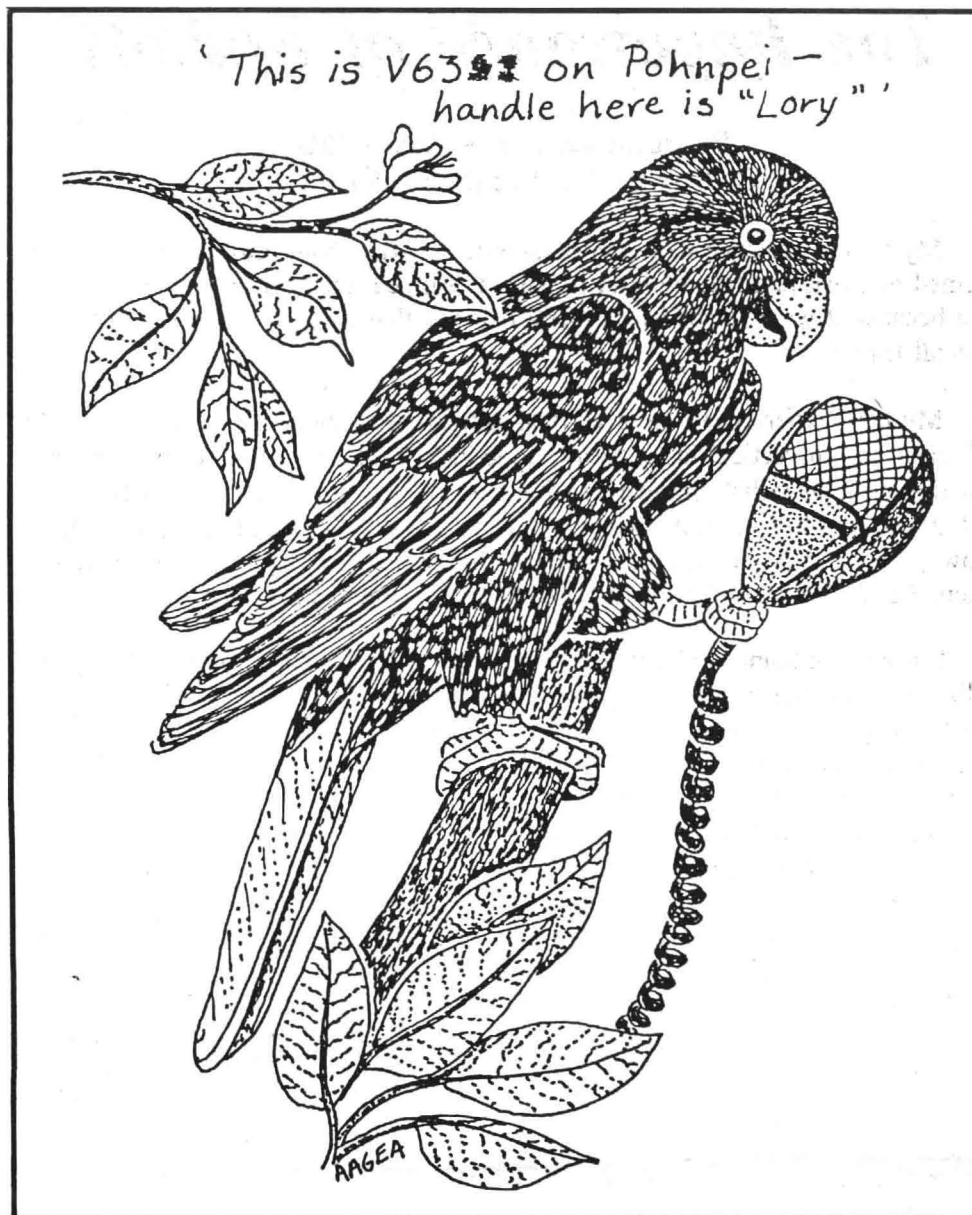
It is not surprising, though, that a tropical island with an abundance of water is a good place for things to grow. The proliferation of rolling hills and towering peaks are carpeted with greenery. The only places not so endowed are the sheer cliffs of volcanic basalt, such as Pohnpei's famous landmark, Sokehs Rock. It does not seem at all out of place in such surroundings to see and hear wild parrots (called "Pohnpei Lories"), except when one realizes that these are endemic to Pohnpei. There are no other Micronesian parrots, and even ornithologists are not sure where they came from - from Melanesia, Polynesia, or somewhere else? - or why.

Pohnpei is also home of a profusion of ethnic and language groups, now all living in their own micro-communities. Ngatikese, Mokilese, Kosraens, Mortlockese, Kapingimarangians, all came to the big land mass of Pohnpei at various times and for various reasons (such as when a typhoon had hit their home island).

Another ethnic and language group that is represented is Americans and other English-speaking peoples. Their arrival has been more gradual - some came as teachers, some as Peace Corps, some as yachters passing through. For the most part, they are less permanent than the people of other areas of Micronesia but, like the others, they have brought their ways and customs. And one of these "strange customs" that some of the Americans have brought is ham radio!

Pohnpei is one of the best-represented "hamming" spots in all of Micronesia, so it is the place where reciprocal licenses and all communication rules and regulations are processed. But, as natural as it is for the rain to fall and for such precipitation to meander downwards, so it is when Amateur Radio and good propagation are around, for antennas to rise and signals to radiate upwards.

Many of Pohnpei's V63-- call signs*, however, are like the migratory shorebirds that just pass through for a time, making lots of noise while there, and then returning to where they came from. Slowly this is changing, and eventually a few radio operators from other countries will put down enough roots of their own to establish themselves permanently on this island, plus native Pohnpeian



and other islanders will become addicted to Amateur Radio communication. Then ham radio will seemingly be as indigenous as that perplexing, squawky Pohnpei parrot.

Kaselehlia oh isiakan-esil

(Greetings/beauty and seventy-three)

* In the previous article of this series, it was reported that call signs for all of the Federated States of Micronesia had been changed to "V76". Please accept sincere apologies for this misinformation. This has been a good lesson to the author NOT to trust everything "heard on the air." □

Fun at the Fest

These W/K Club members were found enjoying themselves at the KMRA Swapfest in October. From left to right are Jim Akre, WA9TZE, South Milwaukee; Brian Cieslak, AE9K, Muskego; and Jerry Scherkenbach, N9AW, of Cudahy. They are wearing matching W/K Club jackets.

- Photo by Rich Regent/K9GDF



The Importance of Radials

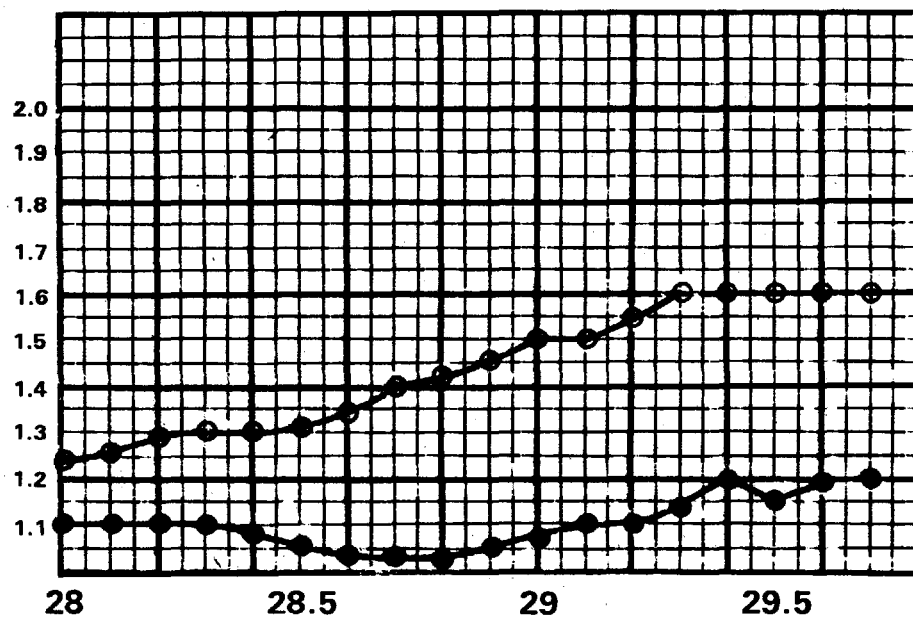
By John W. Frank, WB9TQG
P.O. Box 5113, Madison, WI 53705

My first experience with a vertical antenna was about thirteen years ago. It seemed to work just fine without radials. I realized later that it seemed to work fine because it was clamped to a metal balcony that was part of a building with a metal frame.

My next experience with a vertical antenna was about eleven years ago. In this case, a trap vertical fastened to a pipe driven into the earth seemed to work just fine without radials. However, this past summer I decided to install radials and do some "before and after" comparisons. As the graph at right clearly shows, the SWR dropped significantly. Although field strength readings were not taken, I am convinced that the efficiency of this antenna has increased.

Since the antenna feedpoint impedance at resonance is comprised of antenna radiation resistance in series with earth loss resistance, any decrease in earth loss resistance translates into increased antenna efficiency. One theory as to why vertical antennas without radials can still have a low SWR is that some of the RF from the transmitter is lost in the earth, instead of being radiated from the antenna. Energy lost in the earth won't be reflected back to the transmitter, and thus won't contribute to a high SWR.

Theories abound as to the proper length for radials beneath a vertical antenna. According to Butternut Electronics, "It is pointless to cut radials to resonant lengths because the ground will detune them." My own feeling (based primarily on the amount of wire in my junkbox) is that you can take the amount of wire you have on hand, divide it by the number of slots you are willing to cut in your yard, and put in the radials accordingly. Broadcasters, who need to get every last milliwatt into the air, often use 120 evenly-spaced radials beneath an



○ = SWR without radials ● = SWR with radials

Antenna = Hustler 4BTV

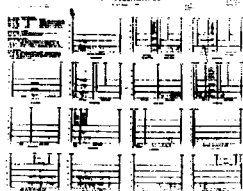
antenna.

What is the optimum length for radials? How many radials are enough? It is possible to have too many radials? When in doubt, read the instructions for the type of antenna you are using. For more information about vertical antennas, I would recommend *All About Vertical Antennas* by William Orr and Stuart Cowan. □

Thank You!

It's the end of another year, and time to thank those who have used their many talents to regularly grace the pages of our humble newspaper. This is a bit risky, because I may omit someone; if I do, please forgive your somewhat decrepit editor. Our gratitude to: Bob Beasley, K6BJH, and Joe Ash, W9ODV, for their unique abilities to help us laugh at ourselves with their original cartoons; Rich Regent, K9GDF, for his "Elmer" cartoons and his excellent articles on many different topics; John W. Frank, WB9TQG, who has helped educate us about many technical parts of our hobby, and reminds us through his "John's Junk Box" series that there are still projects we can build, and not buy. Don't let the BSSS staff be the only ones to thank them: If you can, thank them in person! And, thanks to everyone else who sent articles, photos, etc. during 1990! □

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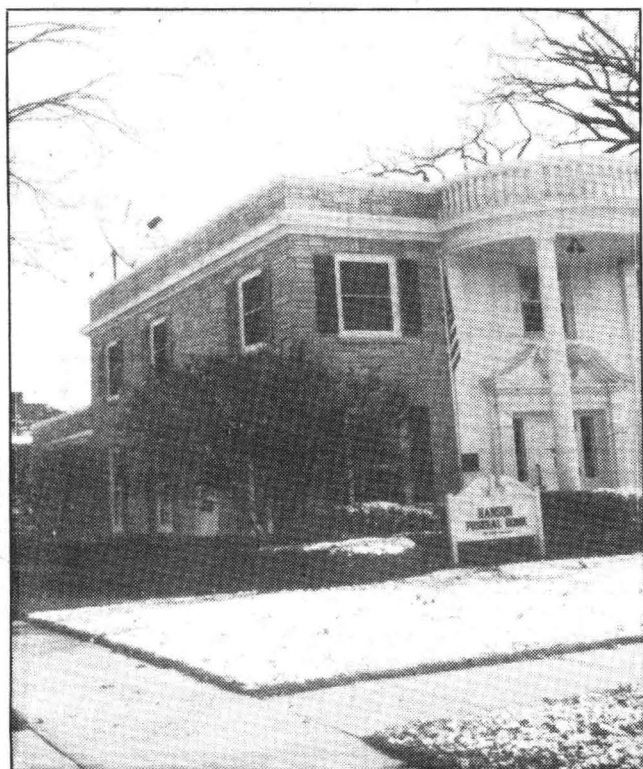
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Beaming Them Home?



State-of-the art technology has brought us many new products and wonders. Thus, when your editor saw the sight pictured above - a local funeral home - it gave him cause to wonder if this funeral home has added the ultimate in the state of the art. Is it possible that they have a direct route to the hereafter?

- Photo by K9ZZ

Swapfest Review

By Richard R. Regent, K9GDF
5003 South 26th Street
Milwaukee, WI 53221

KMRA Swapfest

There is still ample free parking when I arrive at 8:00 a.m. on October 17, 1990. The Kettle Moraine Radio Amateur folks inside the Waukesha Expo Center at the entrance table are friendly, handle tickets fast, and answer questions quickly. Just when most swapfesters are snugly inside, have their rables set up or are combing rows for goodies, Mother Nature can no longer hold back a rain downpour. The metal roofs of the buildings begin thumping with the soothing sound of thousands of water drops.

There is action everywhere. Food and beverages are available. A crowd gathers around the Custom Caps table. Passersby are fascinated with computer entries which move letters on a monitor screen used to design cap and nametag wording.

There are tons of familiar parts and cable vendors - Cable X-Perts, Coax Connection, Denny's Parts, and Ace Electronics. Burk Electronics has a complete selection of ARRL and other books, as well as antennas and many new transceivers. Tower Electronics has several tables of parts displayed neatly in small red plastic baskets, well lit with

gooseneck incandescent lamps. There are also batteries, computers, motion sensors, rolls of stretchy tape, large digital clocks, and used equipment. One vendor has Call Word, a three-dollar homemade computer program which helps find the best phonetics for an Amateur call.

A wealth of information is available from K9IZV, who represents the Friendly 146.91 Milwaukee Repeater Group. Waukesha County Technical College has WA9CQV, Dr. Bob Barnier, to answer questions about electronics training. Bob describes the concepts of his four-exchange telephone demonstration, including busy signals, dial tones, local area networks, and an oscilloscope display.

The clear public address system is sparingly used to announce prize winners and to give information about the Amateur Radio exams held in the south Forum Building. Although attendance appears the same as last year, Fest officials say attendance is slightly better because, instead of dispersing vendors everywhere, one full row in the South Hall is dedicated to them and the other five rows of tables are left empty for ease of movement of the fest attendees. The crowd is kept inside as drizzle turns to rain again about 11:30 a.m. KMRA members are already promoting the 1991 Swapfest, handing out flyers and arranging the same tables or locations with vendors and marking on table maps. Some latecomers are admitted free.

The KMRA was a pleasant place to be on a rainy day. □

Wisconsin Nets Association/ARES News

Packet Compared

CW is limited to around 15 to 25 words per minute, depending on the operator's ability. Reliability is good - a CW signal can punch its way through a lot of QRM and QRN. However, accuracy depends upon both the sending and receiving ops; both are subject to fatigue.

SSB or FM lets us go up to about 150 to 200 words per minute. QRM is a problem at these speeds, and slower speed must be used if traffic is to be passed. Indeed, if traffic is to be written on a message form, the speed is limited to around 25 words per minute. Therefore, there is no net large advantage over CW.

RTTY automates the process, and bumps up the speed to 60 to 100 words per minute. Reliability is about the same as voice, and accuracy is slightly better. Maintaining good accuracy requires careful tuning, listening for a "hit", and human attention while typing.

Packet bumps speed up from 100 words per minute to 1200 baud, a 16-fold increase. Accuracy increases to virtually 100%, because of error checking and system acknowledgements. Furthermore, unlike the other communications methods, many stations can be operating on the same frequency at the same time. Gateway functions permit worldwide contacts via satellite.

Which of the above methods would you choose to pass traffic during a national disaster, in which 100,000 people had to be moved to a location 50 miles from their community?

- Via WB9RQR in *OZARES Newsletter*, 10/4/90, via Rich Regent, K9GDF

Emergency Coordinator and DEC Posts Vacant

A number of Emergency Coordinator positions in Wisconsin are vacant. The counties or areas needing ECs are:

Adams	Ashland	Bayfield
Burnett	Chippewa	Crawford
Door	Douglas	Eau Claire
Florence	Forest	Grant
Green	Jackson	Jefferson
Kewaunee	Lafayette	Langlade
Manitowoc	No. Marinette	Marquette
Menomonee	Oconto	Oneida
Pepin	Polk	Richland
Rock	Rusk	Sawyer
Vernon	Vilas	Washburn

In addition, District Emergency Coordinator posts

are vacant for North West, North Central, and North East Wisconsin. If you are interested in filling one of the vacant posts, contact Section Emergency Coordinator John Leekley, WB9SMM, W169 N8480 Sheridan Dr., Menomonee Falls, WI 53051. □

Launch Set for Nov. 24

The next exciting amateur satellite will again be marked "Made in the USSR." Reliable sources within the Soviet Union have informed Pat Gowan, G3IOR, that the launch of RS-14/RUDAK-2 is now expected to happen on or about Nov. 24. As the launch date firms up, Leonid Labutin, UA3CR, will issue a preliminary orbital element set so amateurs will be able to predict when the first orbits of RUDAK-2 will be in view from their QTH.

The first day's worth of telemetry will be transmitted at 20 WPM using the satellite's CW beacon on 145.822 MHz and/or SSB on 145.948. Only after controllers have determined that all systems are working properly will PSK/BBS/Mode B operations begin. Thanks AMSAT-NA.

- Westlink Report, 11/9/90

New Products

MFJ-207 HF SWR Analyzer

MFJ's innovative new MFJ-207 HF SWR Analyzer instantly gives you a complete picture of your antenna SWR over an entire band - without a transmitter, SWR meter, or any other equipment.

All you do is plug your antenna into the coax connector, set your MFJ-207 HF SWR Analyzer to the frequency you want, and read your SWR. It makes setting up and trimming your antenna precise and easy.

You can take your battery-operated handheld MFJ SWR Analyzer right to your antenna and measure the SWR of your antenna directly. It lets you eliminate the distorting effects of the coax.

You can monitor SWR changes as you make adjustments to your beam or vertical - you'll know right away which way to adjust it. You can shorten or lengthen your dipole and see the effect immediately.

You can instantly check multi-band dipoles and trap verticals to see if the low SWR points are where you want them, and then adjust your antenna until they are right.

You'll find the perfect adjustment for your mobile whip in seconds by actually seeing the SWR as you pull the whip in and out without transmitting. You can easily find the ideal place on your car for your mobile antenna by checking different spots with the MFJ SWR Analyzer.

You can see how the SWR varies over your entire band and quickly find your usable 2:1 SWR bandwidth.

You can see your SWR change as you drive under an overpass and see how mobile whip flutter affects SWR. You can see what happens to your SWR as you swing your beam toward the power line or away from your tower.

You can see how rain or snow affects your beam or dipole. You can tune up your antenna tuner without transmitting. You can check the SWR of the input to your linear amplifier.

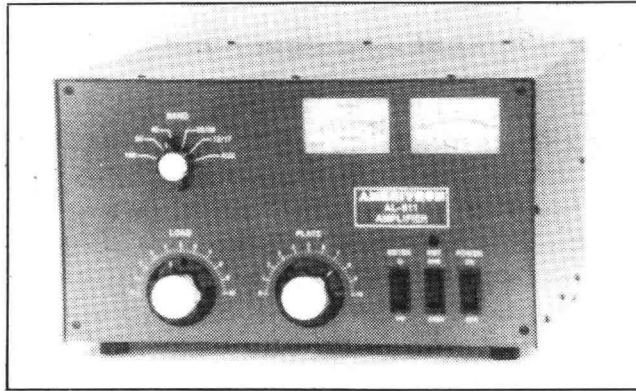
You'll find all kinds of uses for this totally self-contained handheld unit that'll revolutionize how SWR is measured.

The MFJ-207 is actually several instruments in one. It has a low distortion RF generator that covers 10-160 meters, an SWR bridge that gives forward and reflected components, and a computing circuit that automatically computes the SWR and displays it on the meter.

Everything is automatic. All you do is set the frequency and read the SWR. It even has a frequency counter output so you can connect your frequency counter for precise digital readout.

It runs on a 9 volt battery (not included) or 110 VAC with optional MFJ-1312, \$12.95. It measures a compact 7 1/2 x 2 1/2 x 2 1/4 inches. It comes with MFJ's one year unconditional guarantee.

For more information, or to order, contact any MFJ dealer, or call (601) 323-5869; FAX (601) 323-6551; TELEX 53 4590 MFJSTKV; or order toll-free at (800) 647-1800.



Ameritron AL-811 600 Watt Linear Amplifier

Ameritron, the high power specialist, announces the release of the new AL-811 600 watt linear amplifier. The suggested retail price is only \$599.

The Ameritron AL-811 uses three 811A tubes

to deliver 600 watts PEP or 500 watts CW from 160 - 10 meters. (Easy modification instructions for 10/12 meters operation requires presentation of a valid amateur license.)

A pi-network tuned input circuit matches the tubes to 50 ohm exciters. It lets even the fussiest solid state rig perform flawlessly with the Ameritron AL-811.

A vernier reduction drive on the plate control makes tuning precise and easy.

Dual illuminated meters give you a complete picture of your operating condition. One meter gives you a continuous reading of grid current. A second switchable meter lets you monitor high voltage and plate current.

The rugged 811A tubes feature fast 3 second

Please turn to page 11

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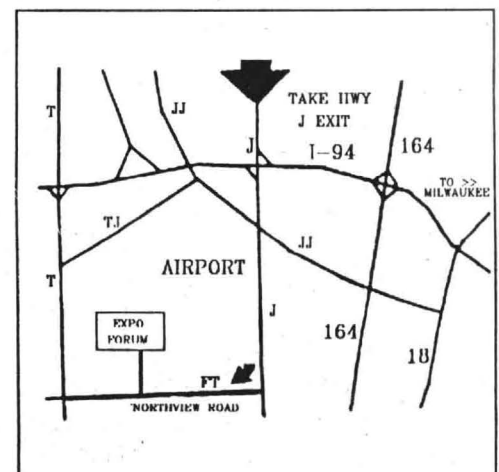
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- MFJ news release

Overly Restrictive Tower Laws Can be Changed

Ordinances restricting the height of communications towers are being adopted all over the country in increasing numbers of communities and counties and other governmental jurisdictions. Wisconsin is no exception.

Some of the ordinances adopted are good faith efforts to protect the safety of people. Some, on the other hand, are introduced and adopted by local lawmakers at the request (or demand) of a friend who may (or may not) have experienced interference from a transmitting station (which may or not have been an amateur station). These ordinances, adopted under the guise of "protecting the public safety", are nothing more than efforts to stop or severely curtail the ability of radio amateurs to use their stations, thereby eliminating radio frequency interference by getting rid of the Amateur Radio (or CB or whatever) station. Some overly restrictive ordinances are adopted simply because neighbors do not like an "unsightly" tower nearby, even though Amateur Radio is a normal use of residential property.

Several years ago, the Federal Communications Commission adopted a document called PRB-1, which established that the federal government alone has jurisdiction over radio stations, because radio signals do not stop at state lines. This does *not* mean, however, that local governments cannot legislate tower heights, setback requirements, and other factors; that falls under the category of public safety, and public safety is still the domain of local governmental bodies. It is when a local government uses the guise of protecting public safety to try to eliminate Amateur Radio activity that PRB-1 comes into play as an effective tool to overturn too-restrictive ordinances. Unfortunately, once an ordinance becomes law, it can be very difficult to have it removed or modified.

It should be noted there that, in addition to using PRB-1 to have overly-restrictive tower laws changed, the First and (I believe) the Fourteenth Amendments to the Constitution have been successfully used in at least one case.

In reading about the various tower ordinances which have been successfully modified around the country, I have noted that some have been willingly changed by some governments after radio amateurs have provided educational information to their lawmakers; those same radio amateurs also attended council meetings en masse to show their support for the modified, less restrictive ordinance.

It is worthwhile to note here that nearly every ordinance which is too restrictive has been overturned in court, when those ordinances have been so challenged. These cases also usually end

with the governmental body paying not only lots of dollars to their own attorneys, but also with the governmental bodies also being ordered to pay the legal fees of the radio amateurs as well. Remember, though, not *all* cases end with such rulings. Most do, but not all. The "aesthetics" reason for restrictive tower ordinances is, from my reading about various cases around the country, one of the flimsiest and most easily challenged.

Another provision in tower ordinances which is not lawful is one which states that, if the neighbors will sign a document stating they have no objection to a tower, the city will permit it to be built. This results in discriminatory and arbitrary law, and has been ruled illegal in a case in the story on this page.

Now, here is what all this has been leading up to. It is best, is possible, to try to have an ordinance modified *before* it is adopted. First, of course, you must be aware that such an ordinance is to be considered. And, here is where education is important. Your legislator needs information if he/she is to make informed decisions about the proposed statute. Now, in your personal opinion, the proposed law might be stupid. You might even consider your legislator stupid. **But, never, never make any kind of statement to that effect to him/her!** He/she may very well dig his/her heels in, and you might be stuck with the law. Be nice, even if you don't feel like it.

You will need to educate your legislator about why certain tower heights are necessary in order to permit an amateur station to be an effective communications system, *especially in an emergency!* You may need to prepare testimony and even some displays to present at a council meeting. It may be very helpful to have non-amateurs who have benefitted from Amateur Radio help during emergencies appear. The American Radio Relay League has memoranda of understandings with the National Weather Service, the American Red Cross, and other agencies; it is very helpful to have a representative from such an agency present testimony for Amateur Radio. Remember that many people know very, very little about Amateur Radio; these people may incorrectly believe that hams "play with their radios just for fun" and probably are unaware that there is a serious side to our hobby.

Do not forget to contact the American Radio Relay League's General Counsel, Chris Imlay, N3AKD, at ARRL Headquarters, 225 Main Street, Newington, CT 06111. Chris can advise you, and perhaps provide you with helpful materials. In hard-case situations, in which it appears that the Amateur Radio operators in a city (village, county, etc.) may have to take a governmental body to court to have

Ohio Amateur Battles Ordinance

Another municipality has found federal law to be on the side of Amateur Radio operators. Rocky River, Ohio attempted to apply three separate ordinances to keep the 30-foot tower of James D. MacMillan, WA8ZHN, on the ground, after his application was rejected by both the building commissioner and the board of zoning appeals.

The town held that the proposed tower would decrease real estate values, was too close to the side lot line, and that certain technical information was missing from MacMillan's application.

According to MacMillan, "the problem with the zoning code is not the 60 foot height limit, but (rather) a provision that the neighbors have a right to protest because they don't like the tower for whatever reason."

This ordinance represented "discrimination under the color of law," MacMillan said. The city "can arbitrarily discriminate based on the whims of the neighbors."

In overturning the town's rejection of MacMillan's application, Judge Frank J. Battisti held that the city did not apply the zoning laws in such a way as to provide for reasonable accommodation of amateur communications. The court said there was no violation of the height ordinance with respect to the distance from the side lot line because the city has interpreted it incorrectly. The federal court also refused the city's request to relinquish jurisdiction to the state courts.

MacMillan was represented by ARRL Volunteer Counsel Robert M. Winston, W2THU, who has won several other tower cases in the Cleveland area. "We have won the battle, but not yet the war," Winston said, because the court has not yet ordered that Rocky River issue a permit to construct a tower.

- *The ARRL Letter*, November 2, 1990

an ordinance overturned, the counsel for the amateurs *absolutely must* consult with Chris Imlay; such communication is attorney-to-attorney. They speak the same language, and it will make things easier for both the attorney for the amateurs and for the amateurs themselves.

- Jim Romelfanger, K9ZZ

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WANTED: ARRL Repeater Directories, editions 1 thru 6. Dennis G. Eksten, W9SS, 5006 N. Second St., Loves Park, IL 61111-5809.

New Products

Continued from page 9

warmup time and extremely low replacement cost. An operate/standby switch prevents harmful thermal shock to your tube filaments by keeping them lighted

while you are operating barefoot. The AL-811 also features a transmit LED.

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The Ameritron AL-811 weighs 30 pounds. It measures 16"D x 13-3/4"W x 8"H. It runs on 120 volts. The export model (Ameritron AL-811X) runs on 240 volts and covers 10/12 meters.

For more information, contact your Ameritron dealer, or Ameritron, 116 Willow Road, Starkville, MS 39759, or call (601) 323-8211, FAX (601) 323-6551, or call toll-free (800) 647-1800 to request a free full line catalog.

- Ameritron news release

Information published in "New Products" is from news releases from the manufacturers, and is normally published verbatim. □

On the Dog Trail

By Loren Kuhnly, KA0TMW
Chairperson, B.A.R.C.
5119 Samuelson Road
Duluth MN 55811

It won't be long before we get some good snow storms and Christmas.. and then it will be Beargrease time! For the sixth time, a group of hardy hams will hit the trail with their equipment and extra long johns to help provide the mushers and the public a means of communication.

B.A.R.C. was formed to provide a "safety net" over the course of the Beargrease Race. Each year, we have run into new difficulties, and we have learned much from the previous year.

In the past two years, the lives of mushers and dogs have relied on the ham operators for the passing of important medical information from both doctors and veterinarians. In the 1990 race, Net Control ran for 138 continuous hours, and with the help of some 40 hams, total ham operating hours totalled 880.

This year, Net Control will be assisted by the use of two computers, which will help to provide updates on many aspects of the race, including the locations of the mushers on the trail and keeping key officials advised of weather conditions every couple of hours.

Even with the help of the computers, the key to the operation of the network is the hams. From those who put in a couple of hours to those diehards who work 24 hours, every guy and gal is important. If you are going to be in the area January 15-20, 1991, and would like to get involved, please give me a call at (218) 729-5801.

If you can't be here to help out, then give our Special Event Station a call. It will be on 80 through 10 meters, phone and CW, using the call sign KB0DAV ("Dogs After Victor").

73, and we hope to hear you on the trail. □

Ad Spaces Available: Beginning with our next issue, several card ad spaces will be open on our back page. A 12-month run is \$60.00, less 2% if paid with the ad order. Full info is available from K9EN; his address is on page 2. □

BEST OF MFJ

MFJ, Bencher and Curtis team up to bring you America's most popular keyer in a compact package for smooth easy CW



MFJ-422B

\$134.95

The best of all CW world's -- a deluxe MFJ Keyer using a Curtis 8044ABM chip in a compact package that fits right on the Bencher iambic paddle!

This MFJ Keyer is small in size but big in features. you get iambic keying, adjustable weight and tone and front panel volume and speed controls (8-50 WPM), dot-dash memories, speaker, sidetone and push button selection of automatic or semi-automatic/ tune modes. It's also totally RF proof and has ultra-reliable solid state outputs that key both tube and solid state rigs. Use 9 volt battery or 110 VAC with MFJ-1305. \$12.95.

The keyer mounts on a Bencher paddle to form a small (4-1/8 x 2-5/8 x 5 1/2 inches) attractive combination that is a pleasure to look at and use.

The Bencher paddle has adjustable gold plated silver contacts, lucite paddles, chrome plated brass and a heavy steel base with non-skid feet.

You can buy just the keyer assembly, MFJ-422BX, for only \$79.95 to mount on your Bencher paddle.

Deluxe 300 W Tuner



MFJ-949D is the world's most popular 300 watt PEP tuner. It covers 1.8-30 MHz, gives you a new peak and average reading Cross-Needle SWR/Wattmeter, built-in dummy load, 6 position antenna switch and 4:1 balun -- in a compact 10 x 3 x 7 inch cabinet. Meter lamp uses 12 VDC or 110 VAC with MFJ-1312. \$12.95.

MFJ-204B \$79.95

Antenna Bridge
Now you can quickly optimize your antenna for peak performance with this portable, totally self-contained antenna bridge.

No other equipment needed -- take it to your antenna site. Determine if your antenna is too long or too short, measure its resonant frequency and antenna resistance to 500 ohms. It's the easiest, most convenient way to determine antenna performance. Built in resistance bridge, null meter, tunable oscillator-driver (1.8-30 MHz). Use 9 V battery or 110 VAC with AC adapter, \$12.95.

SuperActive Antenna

"World Radio TV Handbook" says MFJ-1024 is a "first rate easy-to-operate active antenna ... quiet ... excellent dynamic range ... good gain ... very low noise ... broad frequency coverage ... excellent choice."

Mount it outdoors away from electrical noise for maximum signal, minimum noise. Covers 50 KHz to 30 MHz.

Receives strong, clear signals from all over the world. 20 dB attenuator, gain control, ON LED. Switch two receivers and aux. or active antenna. 6x3x5 in. Remote unit has 54 inch whip, 50 ft. coax and connector. 3x2x4 in. Use 12 VDC or 110 VAC with MFJ-1312. \$12.95.

VHF SWR/Wattmeter

MFJ-812B \$29.95
Covers 2 Meters and 220 MHz. 30 or 300 Watt scales. Also reads relative field strength 1-170 MHz and SWR above 14 MHz. 4 1/2 x 2 1/4 x 3 in.

MFJ-Coax Antenna Switches



\$34.95 MFJ-1701 \$21.95 MFJ-1702B \$59.95 MFJ-1704

Select any of several antennas from your operating desk with these MFJ Coax Switches. They feature mounting holes and automatic grounding of unused terminals. They come with MFJ's one year unconditional guarantee.

MFJ-1701, \$34.95. Six position antenna switch. SO-239 connectors. 50-75 ohm loads. 2 KW PEP, 1 KW CW. Black alum. cabinet. 10x3x1 1/2 inches. MFJ-1702B, \$21.95. 2 positions plus new Center Ground. 2.5 KW PEP, 1 KW CW. Insertion loss below .2 dB. 50 dB isolation at 450 MHz. 50 ohm. 3x2x2 in. MFJ-1704, \$59.95. 4 position cavity switch with lightning/surge protection device. Center ground. 2.5 KW PEP, 1 KW CW. Low SWR. Isolation better than 50 dB at 500 MHz. Negligible loss. 50 ohm. 6 1/4 x 4 1/4 x 1 1/4 in.

"Dry" Dummy Loads for HF/VHF/UHF

MFJ has a full line of dummy loads to suit your needs. Use a dummy load for tuning to reduce needless (and illegal) QRM and save your finals.

MFJ-260B, \$28.95. VHF/HF. Air cooled, non-inductive 50 ohm resistor. SO-239 connector. Handles 300 Watts. Run full load for 30 seconds, derating curve to 5 minutes. SWR less than 1.3:1 to 30 MHz, 1.5:1 to 150 MHz. 2 1/2 x 2 1/2 x 7 in. MFJ-262, \$69.95. HF. 1 KW. SWR less than 1.5:1 to 30 MHz. 3x3x13 in. MFJ-264, \$109.95. Versatile UHF/VHF/HF 1.5 KW load. Low SWR to 650 MHz, usable to 750 MHz. Run 100 watts for 10 minutes, 1500 watts for 10 seconds. SWR is 1.1:1 to 30 MHz, below 1.3:1 to 650 MHz. 3x3x7 inches.

MFJ Ham License Upgrade Theory Tutor

MFJ Theory Tutor practically guarantees you'll pass the theory part of any FCC ham license exam. Versatile MFJ software is the best computer tutor ever tailor-made for ham radio. You can study the entire FCC question pool, selected areas and take (or print) sample tests. Auto. saves each study session (ex. sample tests), gives you all FCC test graphics (ex. mono.), explanations of hard questions, pop-up calculator, weighted scoring analysis, color change option and more. Order MFJ-1610-Novice, MFJ-1611-Tech., MFJ-1612-Gen., MFJ-1613-Adv., MFJ-1614-Ex. for IBM compatible. For Macintosh: MFJ-1630-N, MFJ-1631-T, MFJ-1632-G, MFJ-1633-A, MFJ-1634-E, \$29.95 per license class. MFJ-284 or MFJ-286 \$24.95

MFJ Speaker Mics

MFJ's compact Speaker/Mics let you carry your HT on your belt and never have to remove it to monitor calls or talk.

You get a wide range speaker and first-rate electret mic element for superb audio on both transmit and receive.

Earphone jack, handy lapel/pocket clip, PTT, lightweight retractable cord. Gray. One year unconditional guarantee.

MFJ-284 fits ICOM, Yaesu, Santic. MFJ-286 fits Kenwood.

MFJ-1278 Multi-Mode Data Controller

Use computer to transmit/ receive in all 9 digital modes: Packet, AMTOR, ASCII, CW, RTTY, FAX, SSTV, Contest Memory Keyer and Navtex receive. Easy-Mail™ Personal Mailbox, Built-in printer port, 20 LED tuning indicator, AC power supply, Host/KISS, 32K RAM, Multi-gray level FAX/SSTV modem, CW key paddle jack and tons more. Options include 2400 baud modem (MFJ-2400, \$79.95) and software starter packs with computer cables, \$24.95 each, for IBM compatible, Commodore 64/128, Macintosh and VIC-20.

12/24 Hour LCD Clocks

\$19.95 MFJ-108B \$9.95 MFJ-107B

Huge 5/8 inch bold LCD digits let you see the time from anywhere in your shack. Choose from the dual clock that has separate UTC/local time display or the single 24 hour ham clock.

Mounted in a brushed aluminum frame. Easy to set. The world's most popular ham clocks for accurate logs. MFJ-108B 4 1/2 x 1 x 2. MFJ-107B 2 1/4 x 1 x 2 in.

Cross-Needle SWR/Wattmeter

MFJ Cross-Needle SWR/Wattmeter has a new peak reading function! It shows you SWR, forward and reflected power in 2000/500 and 200/50 watt ranges. Covers 1.8-30 MHz.

Mechanical zero adjusts for movement. SO-239 connectors. Lamp uses 12 VDC or 110 VAC with MFJ-1312. \$12.95.

Deluxe Code Practice Oscillator

MFJ-557 \$24.95

MFJ-557 Deluxe Code Practice Oscillator has a Morse key and oscillator unit mounted together on a heavy steel base so it stays put on your table. Portable because it runs on a 9-volt battery (not included) or an AC adapter (\$12.95) that plugs into a jack on the side.

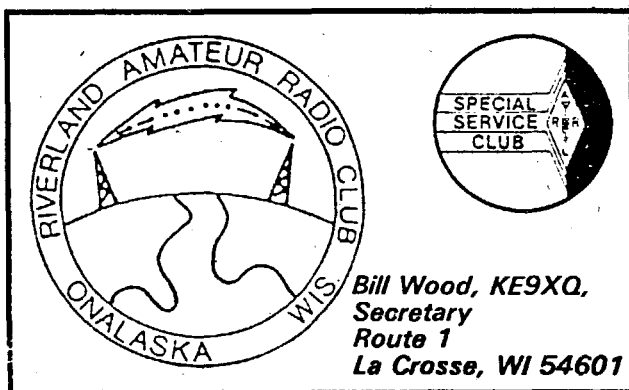
Earphone jack for private practice. Tone and Volume controls for a wide range of sound. Speaker. Key has adjustable contacts and can be hooked to your transmitter. Sturdy. 8 1/2 x 2 1/4 x 3 3/4 in.

MFJ Multiple DC Outlet

MFJ-1112 \$29.95

New MFJ DC Power Outlet saves you space and money. Hook it to your 12 VDC power supply and get 6 DC outlets for connecting your accessories. RF bypassing keeps RF out of power supply from DC line outlet. 13 1/2 x 2 3/4 x 2 1/2 in.

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**Bill Wood, KE9XQ,
Secretary
Route 1
La Crosse, WI 54601**

Greetings.

The regular monthly meeting of the Riverland Amateur Radio Club was called to order by our vice-president, Charlie Burch, KA9UUK.

Last month's minutes were presented and accepted, but for one error. I'd recorded 9:30 instead of 9:00 p.m. air time for "News Line" on 97, Sunday nights. Jim Wiskow, KE9BC, called this to our attention.

Arby Boomer, WF9T, gave his treasurer's report, and it too was approved.

Charlie read a letter to the club from Dick Low, K0JYB, requesting the position of custodian for the 97 repeater. This would cause his call letters to be used and removal of Ray Wakeen's (WA9HHM) call from the repeater's controller. Jim moved we accept this change, and Van Elston, WA9FIO, seconded, and all agreed.

Charlie noted several things that will be voted on next month at our "annual meeting", like dues, officers, and he reminded me that I was to present the club's inventory at this time.

Walter Altus, WD9GCR, then presented several important points about WARC, and moved the club donate \$50 for the League's activities in this endeavor. Dean Summers, KQ0C, seconded, and it

passed.

Our annual dinner is scheduled for Jan. 12th, 6:30 p.m., at Christophers in the Valley View Mall.

Van gave the repeater report. The machine was taken down, "tweaked up", etc., and put back up without the S-meter, because of the matter of construction, both electrical and physical. No modifications were made. It's set up for .2 mV squelch, 80 watts output, and 10 watts for about 4 hours with the battery backup system. Van requested a mike for the repeater site. Rick Williams, KV9U, moved, and John Jorenby, KA9ETH, seconded, and the motion carried to get the mike.

Scott Neader, KA9FOX, brought to our attention the Field Day results from QST. He said, of about 550 entries, we were 38th, which means we came in in the top 6-1/2% of our classification. (Good work, team!)

Charlie said the executive committee was looking into the possibilities of using or getting another repeater to fulfill several needs/wants. Some of these wants would be LaCrosse line phone patch, possible remote base, cross-linking, etc., etc. Dick appointed John Kass, KE9XO, Jule Kish, KA9UJL, Walter, and himself, to look into the subject.

A change in the date of our meeting nights was discussed. Several thoughts, pro and con, were shared. Rick volunteered to check out the community center's calendar for potential changes. Most thought this is a no-win situation, though.

Walter noted hamfest plans were going smoothly. We've had quite a bit of positive reaction. Our apologies go out to those coming to the mall thinking of shopping; guess the stores don't open until noon. We will plan better for this next year, including talkin frequencies; also, several people have asked about testing.

Charlie reported the *Smoke Signals* challenge has had better results than we had anticipated; many of our sister clubs were thinking in the same line, and one of them even gave \$500.

Scott called our attention to the fact the library is keeping up to date Callbooks and Handbooks, and Charlie added we have over a dozen locations we should be servicing, including several high schools.

We are looking for someone to chronicle the history of ham radio in our area. Any volunteers?

Respectfully submitted:

Bill Wood, KE9XQ, Sec. RARC

Attendance

Joe Mazera	WA9SOQ
Fred Sorenson	N0HRN
Walter Altus	WD9GCR
Charlie Burch	KA9UUK
Rick Williams	KV9U
John Jorenby	KA9ETH
Greg A. Miller	KA9FOZ
Arby Boomer	WF9T
Dean Summers	KQ0C
Bill Wood	KE9XQ
Dick Konrad	K9DXO
Van Elston	WA9FIO
Ernie Gershon	K9ZVU
Jack Yoshizumi	W9KTD
Gary Webb	NI9V
Scott Neader	KA9FOX
Karl E. Simonson	KB9EQI
Art Osborn	W0JDC
Mike McAlister	WD9DLM
Jim Wiskow	KE9BC

Eau Claire Amateur Radio Club

Carl Searing, W9NW
Secretary
1129 McKinley Road
Eau Claire, WI. 54703

Minutes of 13 November 1990 Meeting

The meeting was opened at 7:35 p.m. by President Bill Jablonske, W9NNS. Secretary's and treasurer's reports were read and approved.

Old Business

Under the heading of old business, the tower donated to the club was discussed. Due to conflicting reports as to its condition, further checking will be done.

New Business

This meeting normally sees nomination of officers for the coming year, with elections held

during the December meeting. Because of a dearth of volunteers, the existing officers volunteered (were persuaded) to serve again.

It was found that our Hamfest date, selected to be July 13, 1990, has been pre-empted by the site officials. Alternative dates available are July 6 and July 27. It was decided to either obtain the July 27 date if we remain at the existing site, or to try for July 13th at another site, to be investigated by the officers.

The club voted to donate \$100.00 to the *Badger State Smoke Signals* to assist in the purchase of a new computer. We understand that there are matching funds.

KA9HWN reported on the club trailer, which needs further refining for use. Work parties are needed, and those interested should contact KA9HWN.

There appears to be a problem at the base of the 31/91 repeater antenna on the WEAU tower. W9BAR to be contacted, and to check with the station, to ascertain when the tower crew is next due in the area.

N9ISN, Al, has just bought a farm high in the hills at an elevation of 1100 feet. He has volunteered it as a possible site for next Field Day.

Program

Tom King, WF9I, gave a talk/demonstration "An Introduction to Speech Science", which was well received. He showed how our voices make the sounds that they do, how a well-modulated voice is formed, and how it looks on a very sophisticated scope-like piece of equipment. Tom is a Speech Pathologist at UW-Eau Claire, and holds a Ph.D in the subject.

Next Meeting

The next meeting will also be the annual Christmas Party, and will be held at the American Legion Hall on Water Street. Happy Hour will be at 6:00 p.m., with food to be served at 7:00 p.m. Please bring a dish to pass, and your utensils. The club will furnish sliced ham (very appropriate!) and buns and coffee. We hope to see a large turnout. Remember the date: Tuesday, December 11, 1990.

Respectfully submitted:

Carl Searing, W9NW,
Secretary

Northern Wisconsin Radio Club

—Since 1923—



Steve Kraft, KE9RW
Secretary
Rt. 7, Box 62
Menomonie, WI. 54751

The last meeting of the NWRC was held on Oct. 23 at the Peppermill Restaurant in the Thunderbird Mall, Menomonie. President Steve, KA9OMC, called the meeting to order at 7:30 p.m. Minutes of the last meeting were read by Secretary Steve, KE9RW, and the treasurer's report by Jim, NX9F.

Club business was the election of 1991 officers, starting November, 1990. The members elected Steve, KE9RW, as president; Rolin, KE9VA, as vice-president; and Steve, KA9OMC, as Secretary/Treasurer.

The annual club auction was set for Feb. 26 at the American Legion Post, Water Street, Eau Claire. Paul, W9FAC, and Harry, W9FYI, will make the arrangements. The hall will be open at 6:30 p.m. for setup. Please mark all your items with some identification, and indicate a minimum bid that you will accept. The club retains 10% of the sale, and we will have door prizes at this activity. The sale is final, and items for auction should pertain to the amateur and electronic hobby. Admission is free to paid up 1991 members (\$5.00 dues), or \$3.00 to persons wishing to attend but not join. You may opt to join the club and obtain BSSS at the \$10 rate.

The *Who's Who in Amateur Radio* book was discussed again. We still have not received any snapshots of amateurs in their shacks. Pictures can be sent to the club secretary. Include a caption of what you enjoy in Ham Radio. This would be the fourth printing, and it makes a good fund-raiser.

The next NWRC meeting is a tour of the channel 28 transmitter at Wheeler, on November 27,

at 7:30 p.m. Our thanks to Steve, NX9Z, and Kenny, KE9CS, for setting this up. Remember that there will be no meeting in December. The January 22 meeting will be at Rassbach Communications in Eau Claire. February 26 is the auction, and March 26 is a possible tour of WUEC radio station. Field Day June 22 and 23 will be at N9ISN Al's farm.

After our meeting, a presentation was given on the State Patrol microwave communications by electronic technician Brian Hudson. This was a very good program, and many questions followed the presentation. Our thanks to WD9IJY, Don, for arranging the program.

Local Amateur News

Congratulations to recent upgrades Danny Lay; Jim, KA9ZAJ; Dave Kaun; Tom Johnson; Cory Zito; and Eric Thibado.

Bill, NB9H, will be taking new employment in the Danbury area in December.

SAREX May Fly in December!

SAREX '90 may still fly before the end of the year. The planning team reports that NASA hopes to launch Columbia during the first week of December.

There still appears to be a great deal of ham radio interest in this flight. Dr. Ron Parise,

The Menomonie area Red Cross has a VHF 2-meter antenna now for emergency use. They are in need of a 12-volt power supply; contact NX9F.

Menomonie High School now has packet capability; contact KE9RW.

W2GFK, Jerry, is going through some health maintenance. Send your greetings to Jerome Stewart, 319 Elm Ave. W. Menomonie, WI 54751.

The Red Cedar Repeater Association operates the 01/61 Menomonie repeater as an open repeater. Donations can be sent to Vic Hintzman, 333 Shorewood Drive, Menomonie, WI 54751.

W9WDK, Vic, provided the door prizes at our meeting. Thanks, Vic!

The 205/805 Menomonie repeater is moving from Lake Tainter to northwest of Menomonie. The shack is in place, tower base and anchor points installed. Look for the 805 move this fall.

Seasons Greetings!

Steve Hart, KA9OMC, Secretary

WA4SIR, will be on board with an automated "robot" packet radio station and FM voice communication. Both systems will use channels centered in the 145-146 MHz range. Schools all over America will be standing by for voice-relayed conversations with the astronaut.

- Roy Neal, K6DUE, in *Westlink Report*, 11/9/90

Silent Keys

Wally Hobach, K9YZI, Milwaukee, died October 3 at 61 years of age. A memorial service was held October 12. He is survived by two sons and one daughter and many grandchildren. □

Dr. Irvin L. Schroeder, W9VCL, Sheboygan, passed away suddenly of an apparent heart attack on Thursday, October 25, 1990, in Oakland, California. Irv or Doc, as he was best known to all of us, was

72 when he died.

The Ham Radio operators of Sheboygan County have lost a good friend. There isn't one of us who wasn't touched in one way or another by his love for Ham Radio and his willingness to share whatever he had with those who needed help. No one will ever take Doc's place in our lives.

He would want us to remember him at the mike with his faithful sidekick in the background. He is a Silent Key, but what he has done for Sheboygan County Amateur Radio will live long after him.

- Sheboygan County Amateur Radio Club

Herbal Argument Costs \$100

A ham overheard by FCC monitors arguing on the air with Better Amateur Radio Federation net manager Herbert L. Schoenbohm, KV4FZ, has been ordered to pay a \$100 fine. The latest Notice of Apparent Liability to monetary forfeiture (NAL) was issued to Frank King, AA5LY, of Chalmette, Louisiana.

The FCC's Vero Beach, Florida monitoring station says that it recorded the confrontation between King and Schoenbohm on September 29th.

It is not known if Schoenbohm, who already has been ordered to pay a \$1000 fine will be issued an additional citation in this latest matter.

KV4FZ has already responded to the earlier NAL by indicating that he would not pay it until all avenues of appeal are gone. He also insisted before the FCC that he and his compatriots in BARF are the victims of abuse from the rest of the Amateur Radio community.

Schoenbohm, who is the Vice Chairman of the Republican Party in the U.S. Virgin Islands, and a candidate for office, claims that he has sent copies of his response and other documentation to at least twenty senators as a policy statement on his own behalf.

- *Westlink Report*, November 9, 1990

The FCC has issued NALs in another matter; see the FCC news release at right.



NEWS

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10298

This is an official announcement of Commission action. Release of the full text of a Commission order constitutes official action. See MCL: FCC §15.15 F 20 385 (D.C. Circ. 1975)

October 24, 1990

FCC FINES TWO AMATEURS FOR VIOLATIONS ON TWENTY METERS

The following enforcement actions have been taken by the Commission's Field Operations Bureau:

Gordon N. Skul, WB9BCL, of Crete, Illinois, and Glen Baxter, K1MAN, of Belgrade Lakes, Maine, were issued Notices of Apparent Liability to Monetary Forfeiture (NAL) for \$1,000. They were charged with violating Section 97.101(d) of the Commission's Rules which prohibit willful interference. Mr. Baxter's NAL included an additional amount of \$ 500 for violating Section 97.113(c) which prohibits repeated incidents of broadcasting.

Questions concerning this release should be directed to John Hudak, Field Operations Bureau, telephone (202) 632-6977.

- From *The ARRL Letter*, 11/2/90

Don't Leave Your Spouse or Heirs in a Shack Lurch

By Rev. Jim McChesney, WA0PFV
1590 Maria Street, Racine, WI 53404

Married or single, the wise ham of every age could help his/her family and/or heirs in the event of his/her demise by having an inventory of the ham shack and instructions for the disposal of the shack. Especially where there is not another ham in the family, the death of a ham radio operator can leave the widow(er) and/or heirs in a fog of grief about what to do with all that gear.

So, don't put it off: Make up your inventory, and leave your family or friends some clear instructions. I've asked a friend to sell my gear, with some of the proceeds to go to my radio club and the rest to my wife. You might want to help the ARRL Foundation or the Courage Center Handi-Hams or some other ham groups. Make your death mean something. Two forms which you can use are printed on this page.

To be certain that your wishes for the disposal of your station and related equipment are respected and followed, those instructions should be written into your will. The Letter of Instruction form on this page should be filled out and attached to your will.

Remember, to be of any use, the inventory form must be updated on a regular basis! □

Letter of Instruction

(Attach to your will)

To: _____
(The personal representative named in your will)

I designate _____,
a friend and fellow colleague in Amateur Radio, to help you in the disposal of my Amateur Radio station and all equipment related to it, other than mementoes the family may wish to receive. You may wish to obtain his/her assistance in disposing of my station and equipment.

Signed: _____

GEARVAKf is GONEf

We are more than a bit late with this information, but we noted with sadness last spring the end of the famous (or infamous) GEARVAKf Bulletin. That bulletin, filled with some of the best satire and humor this editor has ever read, was edited and published by Joe Ventolo, K8DMZ, of Enon, Ohio. The spring issue was issued at the time of the Dayton Hamvention, and the bulletin made us familiar with the likes of FCC Spokesperson Ralph R. Spiffie, aviator Dr. Phugoid T. Dutchroll, the Thuringula Computer, a new tube-type C-64 computer, and Gorbinski's Mushroom Farm and Septic Tank Service. We were told of the danger of fires on the Amateur Radio bands, like the famous 5-meter conflagration that destroyed the band forever because of thermofrequency heating (TFH), and the potential for the same fate for some of the other bands. We read about one of GEARVAKf's corporate aircraft becoming the first propeller-driven object to achieve earth orbit. We learned of a flounce-in by gay hams protesting in Florida.

In one of the more recent issues, K8DMZ wrote of several "impossibilities" which had appeared in the bulletin that later did occur. Perhaps that was a factor in his decision to discontinue the bulletin! He did say it might return at a later date. This editor (K9ZZ) hopes so. Well done, Joe!

Oh, yes. GEARVAKf. From whence came that odd name? Here 'tis: Greater Enon Amateur Radio Vention And Kite Flyers. The 'f' was silent. □

Amateur Radio Inventory

Name _____ Call Sign _____

Address _____ Telephone _____

City _____ State _____ ZIP _____

Location of Ham Shack: _____

An overall inventory of Amateur Radio gear and related equipment:

Items	Purchase Value	Present Value
Antennae, Coaxes, Towers		
1.	\$	\$
2.
3.
4.
5.
Radio Gear		
1.
2.
3.
4.
5.
Computers, Printers, Typewriters, Etc.		
1.
2.
3.
4.
5.
Clocks, Lights, Power Cords, Signs		
1.
2.
3.
4.
5.
Supplies, Paper, Callbooks, QSL Cards, Etc.		
1.
2.
3.
4.
5.
Other Equipment, Miscellaneous		
1.
2.
3.
4.
5.

Racine Megacycle Club

R. Stephen Bellgraph,
K9ZL, Secretary
402 Shelly Drive
Racine, WI 53405

12 November 1990

Meeting called to order at 7:32.

All hams present, along with members of the Red Cross and Emergency Government, introduced themselves.

Motion made and accepted to accept minutes as published in the BSSS.

Treasurer's report given and accepted. Present balance \$254.68.

Old Business

Dave, WB9USI, informed ARC and EG personnel present what Field Day is all about, and Jim Fox, W9LXY, gave a final report on our Field Day activity. In the 556 in Class 2A, we were 106. Last year, we were 127 of 304 in Class 3A, many more contacts this year than last. Our major increase was in CW, thanks to our refugee from Texas, W5ONL.

Dave reported that our antenna looks just like it did last month. When Dave asked for a report on how it has been working, the report was, "Just fine". When asked why, the answer was "I don't

know if it is vertical, horizontal, or just bent, but it works".

Dave gave a report on the successful 33rd Scout Jamboree on the Air. Scouts were given a good example of what Ham Radio is all about. Contacts were made all over the U.S., as well as Canada.

Packet was also demonstrated. There were 7 Scout Troops involved, as well as Cub Scouts.

Dave also told about our trouble getting the bird catcher loaned by WB9RGO repaired and installed in the trees at camp.

New Business

Bob, W0WLN, presented a motion which would formalize conditions for picking the Ham of the Year, to be presented each year at our annual dinner. Even though some members felt that it was already a matter of record, no one had been able to find a record of it in the Repeater Club or Megacycle notes.

The motion:

I move that the Racine Megacycle Club support a program for selecting and honoring a "Ham of the Year" to be selected from membership of the Amateur Radio clubs of Racine. I further move that the following guidelines for the program be suggested for adoption by this and other clubs supporting the program.

1. One person be selected each year as "Ham of the Year" from membership of the supporting clubs.

2. Selection to be made by the last three living recipients of the award. (Alternate: Presiding officers of the supporting clubs.)

3. The award to consist of a suitable trophy selected by the last three living recipients of the award, plus an engraved nameplate to be attached to the plaque maintained at a place determined by the supporting clubs, at a cost not to exceed an amount determined by the supporting clubs.

4. Selection to be made by December 31 each year.

5. The award to be presented at an annual Amateur Radio banquet sponsored by the supporting clubs.

Motion discussed, then accepted.

Dave discussed the upcoming "Winter Storm Awareness" workshop, to be held Tuesday, November 27, featuring Elroy Jagler from the National Weather Service, and John Malan, from WISN TV-12. It is to be held at 7:30 p.m. at Ives Grove office complex auditorium.

Cheryl Miller, WS9P, gave a report on the status of planning for the upcoming annual dinner. As yet, there has been no committee meeting. The Repeater Club has made \$30 available for the dinner committee.

The December meeting will start with a 6:00 p.m. pot luck lunch at the McChesney home, WA0PFV, followed by a trip through his back yard to a tour of the watercolor show at Wustum, followed by our meeting.

Dick Kehl, WA9HOH, won custody of our goodie box for the next month.

Our program for the evening having not arrived, meeting was closed at 8:32 p.m.

K9ZL, Secretary

ARRL Executive Committee Meets

FCC matters dominated the agenda for the Nov. 10-11 meeting of the ARRL Executive Committee in Hilton Head, S.C.

Executive Vice President David Sumner, K1ZZ, reported on WARC-92 preparations, particularly the League's participation in the FCC Industry Advisory Committee for WARC-92 and the strategy to be followed in responding to the FCC's Second Notice of Inquiry in the WARC preparatory proceeding, General Docket 89-554. Also noted was the League's involvement in CCIR preparation.

Discussions with FCC on possible resumption of club-station licensing will commence, based on a draft outline reviewed at the meeting. Under the proposal, the League would assist in processing club-station applications on a volunteer, no-fee basis.

The Committee approved the filing of comments in an FCC Notice of Inquiry, General Docket 90-357, into the establishment and regulation of new digital audio radio services. The League's comments will note that the issue of allocations for such services is being considered in the context of WARC preparations, and that separate consideration may be premature.

The Committee also instructed staff to seek from FCC a blanket extension of the expiration date of Certificates of Successful Completion of Examination (CSCE) issued to members of the military engaged in Operation Desert Shield.

The status of a number of pending matters was reviewed, including the League's court challenge of the 220-222 MHz reallocation, which goes (went) before the U.S. Court of Appeals for the District of Columbia on Nov. 16.

The minutes of the meeting will appear in January QST.

- The ARRL Letter, 11/16/90

Scouts Enjoy RMC Ham Radio Demo



During the 33rd Scout Jamboree on the Air (JOTA), John Sisson, W5ONL, explains and demonstrates Ham Radio to Scouts from Pack 126 visiting the Racine Megacycle Club station W9UDU. The scouts were given the opportunity to talk to other scouts around the United States and Canada. The Scouts are Andrew Wentzell (seated, foreground), Russell Murphy (standing, at left), and Paul Kunaschl (standing, right).

- Photo and story by Steve Bellgraph/K9ZL

TAYLOR COUNTY AREA AMATEUR RADIO CLUB

Rolland Walty, W9LEE
Secretary
W. 4117 Hwy. 102
Westboro, WI 54490

The next regular meeting will be December 13 at 7:00 p.m. in the Taylor County Courthouse Annex, corner of 2nd and Ogden, Medford, Wisconsin.

Minutes of November 8 Meeting

Meeting was called to order at 7:25 p.m. by President N9GEN. Attending were KA9WDX, N9GEN, KB9BLV, W9QHI, and W9LEE.

Minutes of October meeting were read and approved. The treasurer being absent, there was no treasurer's report. KA9WDX reported that he was still not receiving *Badger State Smoke Signals*, although he had subscribed through the club.

There was a brief discussion of the upcoming Abbotsford Christmas Parade, all club members having received a mailing on the subject from N9GHZ. Also, some comments were made on our favorite subject, the "Polish Razzberry".

There being no further business, the meeting adjourned at 7:44 p.m.

News

Congratulations to former club member WA9BUV, who passed his General Class exam on October 27, after many years as a Technician.

Congratulations also to N9GEN, who passed the written exam for Extra Class the same day.

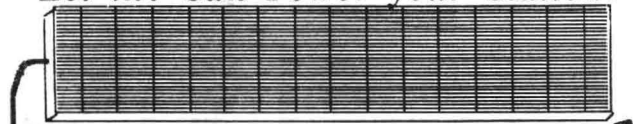
N9GHZ has moved back to Abbotsford after living in Wausau for several months - welcome home, Mike!

Rolland Walty, W9LEE, Secretary

Attention VE Teams

Badger State Smoke Signals wants to help your team help our hobby. Please send your schedule of exam sessions to Ken Ebner, K9EN, 822 Wauona Trail, Portage, WI 53901. If possible, Ken should have your schedule 60 or more days before your session(s). Be sure to list in your schedule any special requirements, as well as any special exams you might have available, such as large type, Braille, etc. Teams report good response to their listings in BSSS. Join them! □

Let the Sun Power your Station!



The \$289.95 Bullet-Tested QRV Solar Power Supply keeps your repeater on the air 'round the clock or powers your 100w HF station 60 hrs a month. Control circuit speeds charge, protects gel cells & sealed batteries. Fully assembled. QRV portable. Easily expanded.

Add \$10 S&H Air Mail Info \$1

AntennasWest
(801)373-8425 Box 50062-SS Provo UT 84605

League Protests Comment Deadline to FCC

The American Radio Relay League has filed an "Application for Review" with the FCC, requesting the commissioners overrule a staff decision. The League seeks more time to respond to proposals for new Morse code testing procedures for disabled persons.

This is the latest episode in PR Docket 90-356, which began with a public announcement by the FCC in early August and culminated in the FCC's denial, on Sept. 28, of the League's request for more time - until Nov. 15 - to comment.

The League has from the very beginning stressed that, since new procedures were implemented for disabled applicants immediately upon the August announcement - and some other accommodations have been in effect for years - there is no urgency in formalizing them through rule-making.

The League maintains that because of the unusually short time frame between public announcement and comment deadline, ARRL found it nearly impossible to study the proposal, seek comment from individual examiners to gain from their experience, and formulate comments on the proposal.

Because of "the significance of the proposal to the Amateur Radio Service," the Application said, the League felt additional comment time was a necessity, not a luxury.

The League pointed out that the main sources of information available to amateurs - the monthly magazines - simply were unable to publicize the matter in time for examiners and the disabled themselves to comment.

Furthermore, the Commission broke with tradition in this matter. In the past, proposals likely to have strong impact on the Amateur Service have

been afforded a reasonable time period.

"This proceeding is not merely a simple matter of attempting to accommodate the needs of the handicapped by waiving an inconsequential examination element," The Application for Review said. "It is, rather, a reversal of stated policy, and an action which stands to jeopardize the integrity of the volunteer amateur radio examination program."

The Application went on to again point out that procedures already in place for accommodating disabilities are producing applications for waivers, some of them frivolous. The list of disabilities (from the Disabled Americans Act of 1990) is overly broad, many of the disabilities having no bearing on someone's ability to use Morse.

As a result of the August announcement, one waiver application - with a letter from an optometrist - sought relief from the Morse requirement for an applicant with a vision problem. A problem correctable with eyeglasses.

The League also noted again that the FCC, in 1982, held that "(s)electing a particular group of license applications for favorable treatment in terms of less stringent amateur operator requirements would not be sound licensing policy.... if such a policy were instituted, the Commission ultimately could find itself in the untenable position of deciding which applicants actually qualified for telegraphy exemptions and which did not. Commission personnel clearly are not trained to make such judgements...."

And so it is that the FCC now proposes to turn what, in 1982, was "not sound licensing policy" into a rule eight years later.

The Application for Review asks for an additional 48 days for comments to be accepted by the FCC.

- The ARRL Letter, 11/2/90

Upgrade Fee to Increase

ARRL VEC Targets Novices

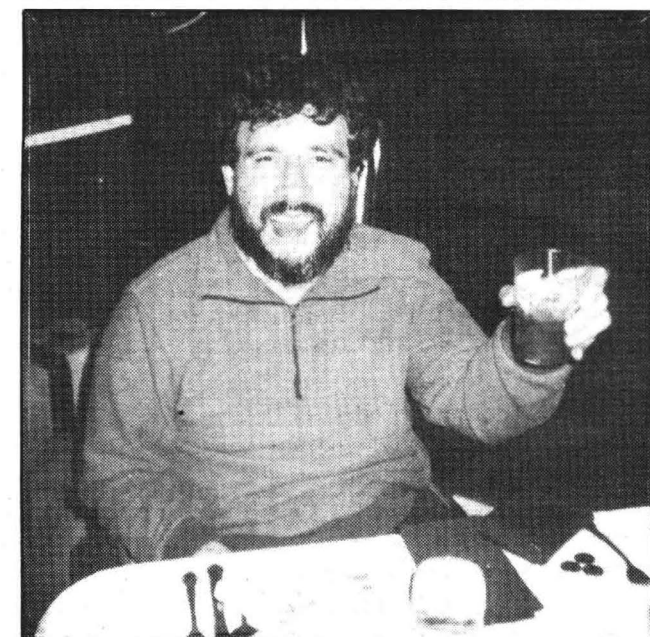
A new pamphlet describing the American Radio Relay League Volunteer Examiner Coordinator Program is being mailed to all new Novice Class licensees. New Novices have not necessarily had any exposure to either the League or the VEC program. The pamphlet describes the licensing upgrading process, how volunteer examinations are conducted, and notes the many services available from the ARRL.

Since July 21, 1984, the ARRL VEC has accredited more than 13,000 examiners, who have conducted more than 11,500 test sessions for some 140,000 people. As a result, 77,500 upgrades have been submitted to FCC.

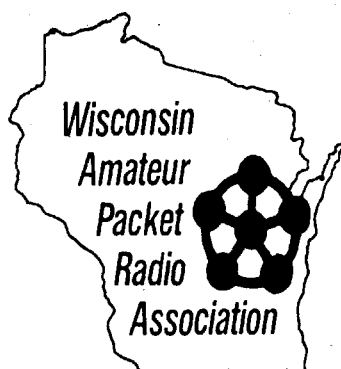
On a related note, the FCC has announced that the maximum allowable reimbursement fee for a volunteer examination will be \$5.27, starting Jan. 1, 1991. The ARRL VEC maximum will be set at that time at \$5.25. There is no fee for a Novice examination.

- The ARRL Letter, 11/16/90

MARA Christmas!!



Lifting his libation high at last year's Madison Area Repeater Association Christmas Party was Dave Schaefer, N9DMS. MARA does it again this year the evening of December 10 at the Heritage House, E. Washington Ave., Madison; make reservations with Jim Waldorf, KB9AQQ, 249-7579. □



THE WISCONSIN PACKETEER

Wisconsin Amateur Packet Radio Association (WAPRA)

c/o Carl Schumacher, N9BYS

7740 Evergreen Terrace, Burlington, WI 53106

Steve Loeffler, WB9ZRE, Editor, 123 W. Oshkosh St., Ripon, WI 54971

WAPRA Meeting Minutes - November 10, 1990,....

Minutes of the Special WAPRA Meeting 10 Nov 90 held at the Stevens Point Holiday Inn.

Meeting was called to order by Fr. Bill - W9NNS, Chairman of WAPRA, promptly at 2200Z.

Minutes of the 1 Sep 90 meeting were read and approved without change.

Those present were :

W9NNS Fr. Bill (Chippewa Falls)
WB9TYT Dan (Milwaukee)
K9MLD Joel (Hartford)
KA9WDX Bernard (Medford)
KD9NV Dave (Stevens Point)
N9BKJ Bob (Waupaca)
N9IAB Michael (Wausau)
N9GHZ Mike (Abbotsford)
KA9BHK Diane (Tomahawk)
KA9BHL Mike (Tomahawk)
NE9U Scott (Stevens Point)
N9CLE Wally (Tomahawk)
WD9ESU Larry (Lodi)
NC9G Art (Park Falls)
KA9EOK Bob (Park Falls)
WB9USI Dave (Racine)
KA9LOK Jim (Racine)
WB9MJN Don (Naperville, IL)
WD9ANY Bob (Milwaukee)
K9VXW Carl (Naperville, IL)
NOGAF Pete (Wisconsin Rapids)
N9BQM Joel (Pittsville)
W9IHW Gus (Port Edwards)
KC9BK Jerry (Brown Deer)

"Old Business" was delayed until after the "New Business" discussion because of the scope of the topic for Old Business.

Fr. Bill - W9NNS, distributed discs and handouts of the ROSE switch and spoke explaining the benefits of it. Recipients of the discs were going to study it's potential for use in the State of Wisconsin.

He further noted that Meteor Hill (Exeland) Node was operational and was "hearing" the northern and western parts of the state with ease. Fr. Bill also discussed the current status of the Rice Lake Node. He announced that WINNS node had decreased its power from 170 watts to 60 watts.

6 meter R/C frequencies were discussed in light of the proposed, but not firm, link frequency of 50.740 MHz. Further investigation will be forthcoming.

KD9NV presented a map of his area and explained the changes already implemented there (see his bulletin[s] regarding same) and noted that 145.010 and 145.630 ports are BOTH opera-

tional in his area at the present time. Dave also noted that equipment would soon be in place for a link (UHF) to Markesan, and equipment and site were being readied for 6 meter link testing.

K9MLD discussed WIANT and progress and future plans for his Antigo site.

N9BKJ noted that he is back "on-line" with a node (WIWAP) and BBS to serve the Waupaca area. He has linkage with KD9NV at present.

Discussion of the Medford Node was also had with agreement by KA9WDX - Bernard, to relocate the equipment at a "better" site, noise-wise, to eliminate the receiver problems experienced at the current site.

KA9BHK - Diane, stated that Antigo Jr. High does operate a packet station, as well as an HF and 2 meter station. Arrangements will be made by KC9BK for her to get information on "PACKET PALS", an organization of grade through high school youths and their ham teachers nationwide so they may participate. (WB9EZY - Tom, @ WD9ANY presently has a large group, 70 of whom are awaiting materials so they may pursue their Novice Tickets)

The 18-part series, Packet Tutorial, present on most of the state BBSs, was endorsed as "excellent" by WB9MJN - Don. The author is WB9LOZ. Those BBSs not having the series could contact WB9TYT or KC9BK for copies.

Under "Old Business", Dan - WB9TYT, presented a thorough discussion of the WAPRA plans for the implementation (step-wise, with the present 145.010 net frequency being utilized by the respective areas until the proposed new "backbone" and LAN system was operating in their specific area(s)) of the new LANs for the entire state.

The new LAN system would set up NINE LANs, with frequency assignments coordinated so the user/FWDing log jam presently seen on 145.010 MHz would be minimized, if not eliminated entirely.

The new LANs are:

Northwest LAN	147.555 MHz
North Central LAN	145.690 MHz
Appleton/Green Bay LAN	145.050 MHz
Central Wisconsin LAN	145.630 MHz
LaCrosse/Riverland LAN	145.090 MHz
Markesan/Ripon LAN	145.970 MHz
East Central LAN	145.650 MHz
South Central LAN	145.070 MHz
Milwaukee LAN	145.090 & 145.690 MHz

Keyboard-to-Keyboard would be restricted to 145.030 MHz in accordance with nationally accepted allocation.

The above LANs would be linked together via a "backbone" network and work is currently being done on implementation of it. It is anticipated that this "backbone" would be running at 4800 baud in most instances.

DXCluster has specific frequencies asked for by them and assigned for both local and "net" use, but currently has to depend on existing "net frequencies" for passing their information. A discussion of the pros, cons, and impact on the existing structure followed.

It was noted that Wisconsin DXCluster frequencies are coordinated with the 9-land bandplan, but that MN was 180 degrees out of step with their local/net frequencies being the reverse of ours. A letter from the MN DXCluster people was read at this point by Fr. Bill - W9NNS.

Dan explained the "Hidden Transmitter" phenomenon for everyone and how it plays into the current set up and would be minimized with the new bandplan.

He also discussed, step-by-step, the handout map and facilities lists.

Dan then amply fielded questions about the new frequency arrangements.

Under "Other":

The question of WAPRA funds was brought up by N9CLE, and was expanded upon by KA9BHK as to specific expenditures aimed at SE Wisconsin. WAPRA Treasurer, Carl - N9BYS, (not present), had suffered an extensive industrial injury and had, to date, been unable to issue a treasurer's report. Attempts will be made to have him do so at his earliest time with special attention to current and past WAPRA expenditures.

The next regular meeting of WAPRA will be Saturday, 12 Jan 91, at the Midwinter Swapfest sponsored by West Allis Radio Amateur Club. Meeting site is Waukesha Expo Center, Highways J & FT, Waukesha. Meeting time and room to be announced. One of the present members asked that the meeting be held early enough to allow for driving home at a reasonable hour.

No further business being noted, a motion for closure was made by Diane - KA9BHK, seconded by Dave - KD9NV, and heartily approved at about 0200Z.

ADDENDUM: Despite the length of the meeting, a post-meeting "social" (impromptu) lasted at least another hour with slides of different stations, lap-top computer teaching and discussion of MSYS files, and renewing old friendships with one-on-one social and technical discussions.

Respectfully submitted, Jerry Bellehumeur, KC9BK

WAPR membership as of November 1, 1990.....

Walter W. Altus, Jr.	WD9GCR	9107
Jack Becker	AE9H	9107
Gerald C. Bellehumeur	KC9BK	9107
Daniel R. Bollander	WB9TYT	9107
Gustave C. Bonow	W9IHW	9107
Jim Boos	WB9YSG	9107
James A. Borowski	WA9YSD	9107
Jim Broulette	WB9RBD	9107
Duane Brummel	NX9K	9107
Verne Buland	W9ZGS	9107
Charles Chenoweth	N9GNQ	9107
Pat Davis	KD9UU	9107
Thomas W. DeWitt	KM5V	9107
Kurt Diedring	WB9GLB	9107
Walt Dieter	N9CLE	9107
Phil Dreis	N9HDT	9107
Dennis L. Dworak	K9AAV	9107
Maurice Ehrhardt	WB9BXR	9107
Joel E. Eschmann	K9MLD	9107
Brad W. Gehrt	KA9JDE	9107
Lloyd Gorsiski	WB9RGO	9107
Ray Greisinger	W9PHF	9107
Al Gudbaur	WB9ZHQ	9107
Bruce Hansemann	W9LCK	9107
Karl Hansen	WB9UUD	9107
Harry S. Hartmann	N9GDY	9407
Nels Harvey	WA9JOB	9107
Roy Hawkins	WA9KEC	9107
Paul J. Hellenberg	KS9K	9107
Ronald W. Hooker	K9WTF	9107
Joseph R. Imilkowski	W9CWD	9107
Bernard Lee Jari	KA9WDX	9107
Norbert F. Kilsdonk	W9SBY	9107
James R. Lackore	AD9X	9107
Dan Lagerman	K9TWE	9107
Terri Larkee	KA9WCF	9107
John LeRoy	W9VWV	9107
Vernon A. LeRoy	KK4IL	9107
John D. Leekley	WB9SMM	9207
John H. Lehmann	KBOYA	9107
Jack McLeland	W9ATK	9107
Arne Moxness	KA9ZPY	9107
Ron Nelson	N9CFN	9107
James E. Opdyke	WA9JTX	9107
Rodney (Red) Pajula	N9GHE	9107
Joel Papke	N9BQM	9107
Lester A. Peterson	W9YCV	9107
T. Rehm	K9PIQ	9107
Michael Robinson	N9EAX	9107
Irv Schroeder	W9VCL	9107
Carl Schumacher	N9BYS	9107
Robert E. Scrip	WD9ANY	9107
Dan Servais	WA9AJW	9107
James N. Sheetz	K9OQO	9107
Larry A. Shields	WD9ESU	9107
Doug Smith	W9WI	9107
Donald L. Staszewski	WA9ZRL	9107
Ralph Storm	K9BED	9107
Steve Uthmeier	WN9K	9107
Adrian Van Der Burgt	K9DHR	9107
Al Van Dynhoven	KB9BYQ	9107
David C. Voss	WB9USI	9107
Hubert G. Willis	W9TQV	9107

Net for HF Packeteers.....

If you are interested in discussing HF packet operations, look on 28.490 MHz (voice) each Sunday at 11 a.m. Net control stations usually are N1GMV or NOLDB.

WAPR Renewals...

Please send all new membership requests or late WAPR renewals to:

Carl Schumacher, N9BYS
7740 Evergreen Terrace
Burlington, Wisconsin 53105

Annual Dues are \$12.50.

N.B. - -

Since the meeting, a message received by KC9BK from N9BYS in response to a call for WAPR financial disclosure stated that Carl, N9BYS, would indeed have one readied before 26 November.

Dan Bolander, WB9TYT, issued (the next day) a list of R/C frequencies that was distributed "RTWIS".

W9WI-1 BBS QRT.....

After almost 6 years of dedicated service to the Madison Area, W9WI-1 BBS ceased operations on November 20th. Doug has accepted a better job opportunity in Nashville, Tennessee. Doug reports that he will not set up a BBS in Nashville as it would only duplicate services already in operation.

At "Packeteer" deadline, no word has been received as to a replacement for Doug's splendid system. At present, Madison will be served by WD9ESU BBS in Lodi. Doug will send word on his new home BBS when he has settled into his new home.

HERTZ VS CYCLES PER SECOND

Have you heard that the family of the late German scientist and inventor Heinrich Hertz is so disillusioned with the state of affairs in radio communications that they have petitioned a court in Berlin for permission to change the family name to "Cycles per Second".

---Tnx W3BE - via Westlink.

TAPR DCD timing problems

I installed the TAPR DCD State Machine Upgrade into my PK-232 and found that DCD performance was severely degraded from the squelch-based DCD operation originally provided by AEA. The modified TNC took up to 250 msec to detect a packet carrier, causing many collisions with other packets I could hear but which the TNC had not yet begun to "hear." Furthermore, it took my modified TNC up to 250 msec to stop detecting a packet carrier after the carrier had actually disappeared. I was about to remove the upgrade from my TNC when I decided to analyze the problem and attempt to fix it.

There were two problems, both of which involved RC (resistor/capacitor) time constants. The 470K resistor at R3 and the 0.1 ufd capacitor at C1 determine how sensitive the circuit is to data. The higher these values are, the longer it will take for the circuit to actually detect a packet carrier. In my case, I was able to get good carrier detect action by reducing the value of R3 to about 256K by soldering a 560K resistor in parallel. This can be done without removing

the daughter board. I suspect that C1 was actually about twice the value specified.

You can tell if your carrier detect timing is near optimum by observing whether your new DCD LED flickers on occasionally when monitoring unsquelched audio with no signals present. If it never flickers on, your DCD sensitivity is less than optimum, and you should reduce the value of R3 or C1. If it flickers on more than once per second on the average, you should increase the value of R3 or C1.

The other problem was caused by the time constant determined by the 220K resistor at R5 and the 1 uf capacitance at C2. These values determine how long it takes for the DCD signal to drop after carrier is lost. My schematic specified a 0.47 uf cap, but the parts list listed the 1 uf cap which was supplied. I found that halving the time constant worked well. I did this by soldering a 220K resistor across R5, but using the originally specified 0.47 uf cap would have had the same effect.

The hang time of the DCD LED once signal is gone should be such that the LED rarely flickers off during a noisy but copyable packet signal. If it flickers off too readily, your station may attempt to ACK (or NACK) a packet before it is finished being sent.

Hope this helps. 73 de <<Dick>> N9EX

QUICKIE LITTLE UTILITY

Here's a quickie little utility I find handy when I run a big batch file. It'll cause your speaker to beep when executed; at 12 bytes long, you won't miss the disk space..

Here's how to create it:

Run DEBUG.COM. (this utility should have been provided with your DOS) You should get a prompt. Type "E100<return>". A two-digit number will be displayed, followed by a period. Type the following:

```
B4<space> 0E<space> B0<space> 07<space> B7<space>
01<space> B3<space> 01<space> CD<space> 10<space>
CD<space> 20<space><return>
```

(do NOT press return until instructed!)

Now, after pressing return, you should get another - prompt. Name the utility by typing "NBEED.COM<return>". Type "RCX<return>"; you'll get a colon prompt. Type "OC<return>", then "W<return>". It'll say "Writing 000C bytes"; when you get the - prompt again, type "Q<return>", and you'll end up back at DOS.

Do a directory; you should now have a 12-byte file called BEED.COM. Run it; your computer will beep. That's all there is to it!
73 Doug, W9WI

Shortly after obtaining my ticket, I was listening to some hams on a repeater talking about gas-fet pre-amps. This aroused my curiosity so much, that I broke in on the qso and anxiously inquired- "what kind of gas is used to feed the pre-amp"? Obviously my ignorance was exposed to the entire ham community. hi hi

Yellow Thunder Amateur Radio Club



**K90DK
WB9FDZ**

**Art Kleefisch, W9WSS
Secretary
1014 5th Street
Baraboo, WI. 53913**

The YTARC meets in the Baraboo Civic Center at 7:30 PM in the scheduled room.

December 13 (Thursday) Room 14
January 15 (Tuesday) Room --
February 13 (Wednesday) Room --

Minutes of
YTARC November 14 Meeting.

The meeting was called to order at 7:50 pm by President Duane Grotophorst. The following members were present:

Duane Grotophorst, KA9HKL	Logenville
Jim Decker, WB9UQT	Baraboo
Harry Mayland, K9FFT	Baraboo
Harry Westlund, K9EHJ	Baraboo
Art Kleefisch, W9WSS	Baraboo
Dennis Sweeney	Portage
Joey Sweeney, KB9ERR	Portage
Dennis Sweeney	Portage

The minutes of the October meeting were accepted as published in BSSS. The Treasurer's report was accepted.

Dennis Sweeney reported that he knows of several people in Portage that are interested in Novice Classes. This led to a discussion of holding these classes in Portage. If someone can suggest an acceptable meeting place in Portage, this option will be considered. No time schedule was set to hold these classes, it may be as late as March.

Election of club officers for 1991 will take place next month. The following nominations were made at this meeting.

For President: Harold Reif, KA9YQP
Art Kleefisch, W9WSS

For Vice President:
Ken Johnson, K9DZG
Steve Schwoegler, WB9RNL

For Secretary:
Duane Grotophorst, KA9HKL

For Treasure:
Jim Decker, WB9UQT

Remember that some of these nominees were not present to indicate that they would run. Nominations will be accepted at the December meeting before the election. The December 13 meeting will be the annual Christmas meeting. Every one should bring a two dollar exchange gift.

Jim, K9ZZ, was picked for Buck-nite. Jim was not present to collect.

Art Kleefisch, Secretary

YTARC BIRTHDAZE

Jim Romelfanger	K9ZZ	December	6
Duane Grotophorst	KA9HKL	December	31
Art Kleefisch	W9WSS	December	20

SENTENCE SERMON

How beautiful upon the mountains are the feet of him that bringeth good tidings, that publisheth peace; that bringeth good tidings of good, that publisheth salvation; that sayeth unto Zion, Thy God reigneth!

---Isaiah 52:7

THE TEST POINT (continued from page 3)

Tomahawk, WI
Last Saturday of every month. Jan. thru Oct.
Tomahawk Volunteer Examiners (ARRL/VEC).
Tomahawk, WI. No pre-registration required, but appointment would be appreciated. Registration at 8:30 a.m. and testings starts at 9:00 a.m. For location or other information, inquire on 145.43 MHz. repeater or contact: Greg Garner, WA9W, 4088 Highway 51, Harshaw, WI 54529. Telephone (715) 453-7096.

DUBUQUE, IOWA (ARRL/VEC)
December 8, 1990

Exams are at 9 a.m. in the Central Fire Station at 9th and Central in Dubuque. Use the basement entrance on 9th Street. Contact Mike Jozefowicz, NSOU, 2735 Hickory Hill, Dubuque, Iowa, telephone 319-582-8563. Talkins are on the 147.84/24 and 147.63/03 repeaters.
(Thanks Art Evans, KA9KLZ)

Loves Park, IL
Third Saturday of every month.
Northern Illinois Volunteer Examiners (DeVry VEC). Held at North Suburban District Library, 6340 North Second St. (Hwy. 251), Loves Park, IL. Contact: Dennis G. Eksten, W9SS, 5006 N. Second St., Loves Park, IL 61111. (815) 877-6768.

MINNESOTA TESTS

December 1, 1990	SPRC
December 8, 1990	BARC
December 15, 1990	SEMARC

Locations and contacts:

St. Paul Radio Club (SPRC)
St. Lukes School (cafeteria)
1065 Summit Ave.
St. Paul, MN
contact: Jay Bellows (612) 222-7253

Bloomington Amateur Radio Club (BARC)
Creeside Community Center
98th and Penn Ave. So.
Bloomington, MN
contact: Art Putt (612) 881-7181

SE Metro Area Radio Club (SEMARC)
St. Thomas Aquinas Activity Bldg.
920 Holly Ave.
St. Paul Park, MN
contact: David Harrell (612) 459-1647

The above Minnesota test are listed as a help to readers near or traveling thru the area. If you are interested in any of these, please save this listing as we may not always have space available to list them. Thanks to "Ground Wave" for the above information.

This section of Badger State Smoke Signals is available to publicize your Volunteer Examiner Amateur Radio license examination schedules.

Please send us your schedules of dates, times, and locations that you will be conducting examinations and we will include the information here. Be sure to include contact address and any other necessary requirements. Information should be sent to K9EN at the address shown on page 2.

Letter from a reader.

I would like to send my sincere thanks to N9IAI, Bob, N9JQR, Frank and W9BCC, Frank for their wonderful help at the time of our accident. My wife and I are feeling much better now.

I also received my Air Force MARS license in September. The Call is AFA3HF
---Adrian E Apple, KA9FVX

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